

Rhetorical Strategies and Generic Conventions in the Galenic Corpus

Todd Anthony Curtis

Dissertation submitted for the degree of Doctor of Philosophy
Newcastle University

2009

NEWCASTLE UNIVERSITY LIBRARY

208 30262 6

THESIS L9324

Abstract

This is the first extensive comparative study that systematically illustrates how Galen tailors his rhetorical strategies according to the genre of literature he is using. This study is part of a growing body of literature which attempts to address the over-arching question posed by Prof. van der Eijk in *Toward a Rhetoric of Ancient Scientific Discourse*—‘How was scientific knowledge expressed and communicated in the ancient world?’. The particular aim of this study is to provide insight into the interrelationship between scientific knowledge, genre and rhetoric in the Galenic Corpus. To illustrate this, six Galenic texts were selected as exemplars of different types of scientific communication: protreptic, prolegomena, medical commentary, isagogic text, thesis and scientific treatise. Each exemplar is systematically analysed in respect to its understood objective, participants (author/audience), structure, language, level of explanation and the kinds of proofs used. This analysis is informed both by modern linguistic theory as well as by ancient definitions and practices of the aforementioned types of discourse. The format of this study lends itself to drawing comparisons between the aforementioned texts. This study illustrates how Galen is a skilled communicator who adjusts his authorial posture, arguments and stylistic register to a broad range of communicative situations and audiences.

Statement of Content

This thesis is the product of my own work, and it does not contain material done in collaboration. The text of this thesis, including references, footnotes and appendices but excluding works cited pages, is 89,000 words long, which adheres to the guidelines set out by the School of Historical Studies for a PhD thesis. Unless otherwise stated, all translations are my own. When possible, I have used critically edited texts for the Galenic works being analyzed. For Galenic texts without critical editions, I have primarily turned to Kühn's *Claudii Galeni opera omnia, Medicorum Graecorum opera quae exstant*, which appears as K. from here on. All abbreviations used in this work for Galenic and Pseudo-Galenic texts can be found in Appendix A. Abbreviations used for other ancient authors and their works can be found in the ninth ed. of Liddell & Scott's *Greek-English Lexicon* (1996) xvi–xl, as well as in the *Oxford Latin Dictionary* (repr. 2005) ix–xx. Unless otherwise specified, ancient dates are from the third ed. of *The Oxford Classical Dictionary* (rev. 1999). All errors and inaccuracies in this thesis are entirely my own.

Acknowledgements

I would like to thank the Wellcome Trust for its generous financial assistance, which has made it possible to pursue my studies in the history of medicine at Newcastle University. Thus, I am also the beneficiary of the vibrant research community in the history of medicine, which the Wellcome Trust promoted through their funding of the Northern Centre for the History of Medicine. It would have been impossible for me to have received an MA in the History of Medicine and to have pursued this research project in another setting and without the studentships I received from the Wellcome Trust. Furthermore, the Wellcome Trust's funding scheme afforded me with the opportunity to present my research at numerous important conferences in my area of studies. In short, I am deeply appreciative of the Wellcome Trust's commitment to the history of medicine.

I would also like to thank Newcastle University, which helped offset some of the financial burdens of my international tuition via its Overseas Research Students Award and the International Research Scholarship. It has been a pleasure to be a part of a university that supports and promotes the history of medicine.

I would like to thank Prof. Lesley Dean-Jones, who fostered my studies in ancient medicine and has played an important role in my academic career. I am grateful to my MA supervisor, Dr. Thomas Rütten, who gave me a deep appreciation of the reception of ancient Greek medicine. Deep thanks go to my secondary supervisor, Dr. Jaap Wisse, whose advice and detailed, constructive criticisms have refined my arguments, especially in matters of ancient rhetoric. This thesis owes its aim and scope to my primary supervisor, Prof. Philip van der Eijk, whose interest and knowledge of scientific rhetoric emboldened me to take up this study. I will be forever grateful for all the guidance, encouragement and support he has given me throughout my studies. He is truly my Μέντωρ.

To the staff and my postgraduate colleagues in the School of Historical Studies at Newcastle University, thank you. You were a joy to work with, and I appreciate all the support I received from you. I would like to express my gratitude to Emmeline Aguirre for proofreading and lending her knowledge to the final editorial changes. I would also like to thank Jennifer Gane for her kind assistance in the process of submitting my thesis from overseas. A very special thank you goes to my mother and father, Dixie and Cliff Curtis, whose love and support over the years have given me the confidence to challenge myself. And, to my wonderful wife, Emerald, no words will suffice to express my gratitude for all the sacrifices you have made for me in this endeavour. I love you. Lastly, I would be remiss not to thank my Lord and Savior, Jesus Christ, for making all of the above possible.

Table of Contents

Abstract	2
Statement of Content.....	3
Table of Contents.....	5
Introduction	8
I. Methodology and the aims of the study	8
1.1 The aim of this study	9
1.2 Methodology	11
1.3 Problems and pitfalls of this study	13
II. Medicine and rhetoric in the Galenic Corpus	15
2.1 Galen's rhetorical education	15
2.2 Galen's perspective on rhetoricians and rhetoric	16
2.3 Galen's theoretical perspective on the epistemological merits of argumentation, language and genre	18
Preserving and Presenting a Scientific Oeuvre: <i>Prolegomena</i> and <i>De libris propriis</i>.....	21
I. Introduction	21
II. Genre	23
2.1 <i>Πινάκες</i> , <i>prolegomena</i> and the communicative context of <i>Lib.Prop.</i>	23
2.2 Rhetorical conventions	27
III. Audience	29
3.1 The role of the dedicatee.....	29
3.2 Ideal audience.....	30
IV. Author	31
4.1 <i>Περί αὐτολογίας</i> and Galen's authorial egotism.....	31
4.2 Galen's construction of the scientific author.....	35
V. Message	38
5.1 Chronological structure.....	38
5.2 Thematic structure	41
VI. Conclusion	45
Interpreting Medical Texts: Commentaries and <i>In Hippocratis de natura hominis commentarii II</i> and <i>In Hippocratis de salubri victus ratione commentarius</i>	46
I. Introduction	46
II. Genre	48
2.1 Exegesis	48
2.2 Exegetical writings	51
III. Audience	54
3.1 Ideal audience.....	54
3.2. Presence of the audience	55
IV. Author	57
4.1 Presence of the author.....	57
4.2 Exegetical authority.....	58
V. Message	62
5.1 Paratextual features.....	62
5.2 Galen's lemmatology.....	64
5.3 Revealing the elements in <i>Nat.Hom.</i>	67
5.4 Authenticity and the characterization of the authors	72
VI. Conclusion	78
Promoting the Study of Medicine: The <i>προτρεπτικός λόγος</i> and <i>Exhortatio ad medicinam</i>	80
I. Introduction	80
II. Genre	82
2.1 <i>Protr.</i> and the <i>προτρεπτικός λόγος</i> in rhetoric and philosophy.....	82
2.2 <i>Protreptic discourse</i> and the acquisition of students	85
2.3 <i>Protr.</i> and the Galenic Corpus	88

III. Audience	89
3.1 Ideal audience	89
3.2 Galen's opponent	91
3.3 Historical audience	93
IV. Author	94
4.1 Authorial presence	94
4.2 Poetry, literature and authorial identity	95
V. Message	96
5.1 Structure	96
5.2 Theme	98
5.3 Style	100
VI. Conclusion	105
Investigating a Medical Problem: Θέσεις and <i>Thrasybulus sive utrum medicinae sit an gymnasticae hygiene</i>	106
I. Introduction	106
II. Genre	108
2.1 The πρόβλημα and the decorum of extemporaneous speech	108
2.2 The θέσις and the conventions of philosophical inquiry	111
2.3 Thras. and the Galenic Corpus	115
III. Audience	115
3.1 Dedicatee	115
3.2 Addressees and the ideal audience	117
3.3 Presence and role of the interlocutory-you	118
IV. Author	119
4.1 Presence and role of the author	119
V. Message	122
5.1 Structure and organizing principles	122
5.3 Logical language and rhetorical appeals	125
3.4 Polemical remarks and logic	129
VI. Conclusion	130
Introduction to Medical Practice: Εἰσαγωγή and <i>De pulsibus ad tirones</i>	132
I. Introduction	132
II. Didactic Strategy	133
III. Genre	139
IV. Author	141
V. Audience	145
VI. Use of <i>Puls</i>	147
Scientific Treatise: Πραγματεῖαι and <i>De Foetuum Formatione</i>	149
I. Introduction	149
II. Genre	151
III. Audience	154
3.1 Audience-orientedness	154
3.2 Presence of the audience	157
3.3 Auto-references and the ideal audience	158
IV. Author	159
4.1 Construction of the discourse community	159
4.2 Authorial presence and scientific ethos	163
V. Message	166
5.1 Beginnings	166
5.2 Organizing principles	168
5.3 The embryo and anatomical evidence	169
5.4 Scientific ἀποδείξεις and the modality of philosophical inquiry	172
VI. Conclusion	177
Conclusion	178
I. Presence of the author and audience	178
II. Authorial personae and the scientific self	180
III. Historical and ideal audience/dedicatee and addressee	181
IV. Organizing principles and stylistic register	183

V. Scientific evidence and theoretical explanation..... 184

VI. Galen among his predecessors and contemporaries..... 186

Appendix A Abbreviations of Galenic and Pseudo-Galenic Texts 188

Appendix B Analytical Outlines of Galenic Texts 192

Appendix C 204

Works Cited 213

Introduction

I. Methodology and the aims of the study

Speech (τὸ λέγειν) is not particular to rhetoric (ῥητορική) but is common to every form of learning which uses words; for medicine speaks well (εὖ λέγειν) concerning its own theoretical principles, and music concerning those of music.

– Sextus Empiricus (c. late 2nd century AD), *Math.*, 2.51.

The above quote illustrates two issues seminal to this study. First, it suggests that in the 2nd century AD, there was such a thing as medical discourse and that this type of discourse was associated with other learned studies (μαθήματα), or sciences if you will.¹ The quote also sheds light on the relationship between ‘speaking well’ (εὖ λέγειν) and ‘rhetoric’ (ῥητορική). For Sextus, a scientific author speaks well when he does not ‘turn aside from customary speech’ (ὁ μὴ ἐκκλίνων τὰ κατὰ τὴν συνήθειαν λεγόμενα) and when he is a master of the subject.² Sextus reveals an ancient understanding of the interplay between scientific knowledge and the effective use of language.

Although Sextus has speech (τὸ λέγειν) in mind, this study pertains to the other form of discourse, namely writing. In the 2nd century AD, these two forms of communication were not far removed from each other, especially when one considers that texts were often produced by dictation and that authors tended to respond to their predecessors’ writings just as if they were carrying on a conversation with a contemporary.³ Considering the different usages and theoretical definitions of the term ‘rhetoric’, for the purpose of this study ‘rhetoric’ is used to refer to the formal techniques used by authors to effectively convey their message in a particular communicative context and for a specific purpose, i.e. ‘speaking well’.

¹ In this study the term ‘discourse’ is used to cover both oral and written expression and both semantic and pragmatic aspects of communication. van der Eijk 1997, 77, n. 1. The term ‘science’ is used for any serious endeavour to gain knowledge of the nature of things, and therefore, ‘scientific discourse’ refers to oral and written accounts that attempt to provide veridical ‘representations of aspects of the world that answer to evolving human interests’. Kitcher 2002, 405. In respect to ancient scientific texts, I am speaking to works written on subjects, such as medicine, architecture, music, mathematics, astronomy and philosophy. While such subjects do not meet the modern definition of ‘scientific’, they do encapsulate the ancient sciences, i.e. the epistemological concepts associated with μαθήματα. van der Eijk 1997, 77, n. 1. In regard to the errant explanations of ancient medical theories being called scientific, while I do not take an antirealist position in respect to scientific truth, one should bear in mind, nevertheless, that many of theories in the past which enjoyed considerable success have been disproved, and therefore, the history of science reminds us that no generation’s scientific explanations are immune to falling under the scrutiny of the next. Laudén 1981.

² Sextus Empiricus, *Math.*, 2.52.

³ Schenkeveld 1992; Dorandi 1993.

No physician in antiquity was more cognizant of the power of language and the limitations of genres of discourse than Claudius Galenus (AD 129–c. 210). In his writings, one will find numerous discussions and texts concerning the epistemological value of language and its relationship to scientific discourse. As von Staden has pointed out, Galen believed a ‘good scientist’ should be a ‘historian of both science and of language’.⁴ Galen’s commitment to the proper usage of language can also be perceived in the way he censures his predecessors and contemporaries for their imprecise terminology as well as their lack of attention to the epistemological value of various genres of prose and poetry.⁵ As to his own communicative practices, Galen’s corpus of writings attests to his use of a broad range of types of scientific discourse which we identify with terms such as exhortations, introductory texts, commentaries, polemics, letters, technical handbooks, theses, treatises, bibliographical texts, epitomes and glossaries. While many of these types of prose have a recognizable medico–philosophical pedigree,⁶ it is difficult to find meaningful precedent genres for some of Galen’s writings, all of which make Galen a fascinating and complicated medical author.⁷

1.1 *The aim of this study*

Most of the Galenic scholarship in the 20th century was dedicated to explaining Galen’s position on medicine and philosophy. With the increasing interest in a socio–cultural approach to medical history, the last 20 years have seen an increasing amount of scholarship dedicated to Galen’s communicative theory and practices as well as his relationship to the epideictic culture of the 2nd century AD.⁸ López Férez and Percy have sketched out Galen’s position on rhetoric and rhetoricians.⁹ One can find a number of articles and chapters discussing Galen’s views on the epistemological merits of language and of genres of literature.¹⁰ Other notable studies that have contributed to our understanding of Galen’s approach to scientific discourse are von Staden’s informative study of Galen’s use of ‘genre’

⁴ von Staden 1995b, 517.

⁵ de Lacy 1966a; Sluiter 1995; Tieleman 1996, 219–248.

⁶ Althoff 1993; van der Eijk 1997, 89–90; Schenkeveld 1997; Wittern 1998.

⁷ For example, there is no ancient genre of scientific prose which reflects *Praen.*’s odd combination of case histories, theoretical information and autobiographical details. As Nutton notes, *Praen.* is both a ‘puzzle of literary form’ and an ‘important social document of the Antonine Age’ which should be ‘rescued from neglect’. Nutton 1988a, 62.

⁸ Bowersock 1969, 59–74; Kollesch 1981; von Staden 1995b; 1997; Swain 1996, 357–379. cf. Brunt 1994, 43–46.

⁹ López Férez has provided brief discussion of the concepts Galen associates with the terms ῥητορική and ῥήτωρ. However, his treatment of Galen’s use of ‘technical’ rhetorical terminology is problematic. López Férez 1994. cf. López Férez 1999. A more well-rounded treatment of Galen’s perspective on rhetoric and medicine can be found in Percy 1993.

¹⁰ A selection of scholarship on these subjects can be observed in the following: de Lacy 1966a; Edlow 1977; Hankinson 1994b; von Staden 1995b; Sluiter 1995; 1995; Tieleman 1996, 219–248; Morison 2008.

terms and Singer's discussion of Galen's levels of explanation.¹¹ Durling has provided a series of short studies concerning aspects of Galen's language and style.¹² Another recent approach to Galen's rhetoric is Mattern's study of Galen's depictions of his interactions with patients.¹³ While there have been a number of works on Galen's communicative practices within specific genres of scientific prose,¹⁴ these studies, by and large, have not taken a comparative approach to Galen's genre rhetoric. A notable exception is Asper's recently published monograph, *Griechische Wissenschaftstexte*, which looks at the communicative practices of a variety of authors, including Galen, with respect to their use of different types of scientific writing.¹⁵ With that said, to date, there has not been an extensive trans-genre study that illustrates how Galen tailors his rhetorical strategies to the genre he is using.

The aim of this study is to address the over-arching question—What is the interrelationship between scientific knowledge, genre and rhetoric in the Galenic Corpus?—by analyzing Galen's rhetorical practices in a variety of different genres of prose.¹⁶ This study takes a socio-historical approach to rhetoric. Therefore, the following questions will be addressed: For Galen, what makes a discourse more or less scientific, or for that matter, more or less medical? How does Galen's rhetorical practice within different genres correspond to his theoretical position on scientific language? What modes of verbal expression, technical idioms, stylistic registers and genres did Galen use to convey his views to a wide variety of audiences, and what communicative strategies did he employ to make his ideas intelligible, persuasive and fashionable?¹⁷ What rhetorical strategies does Galen employ to protect himself from censure when entering into a discourse that he perceives to be less scientific? How does his choice of genre contribute to his explicit and implicit purposes for writing on a subject? What are the interrelationships between different genres in scientific literature? Does Galen's authorial presence vary from genre to genre? What is the relationship between Galen's authorial posture and the genre he is writing in? How does he use the rhetorical figure of 'the audience' (i.e. dedicatee, addressee and the explicit audience) to contextualize his message?

¹¹ Singer 1997b; von Staden 1998.

¹² Here, I am speaking to the series of articles written by Durling 1979; 1986; 1988; 1992.

¹³ Mattern's work focuses upon the ways in which Galen presents himself through physician-patient narratives. Mattern 2008.

¹⁴ Some recent noteworthy studies are Boudon 1994; 2000; Manetti and Roselli 1994; Mansfeld 1994, 117–176; Asper 1996, 331–335; 2005; Oser-Grote 1998; von Staden 2002a.

¹⁵ Asper 2007.

¹⁶ The conception of this thesis and many of the questions that will be considered are derived from Prof. van der Eijk's work, 'Towards a Rhetoric of Ancient Scientific Discourse'. I was intrigued by and have greatly benefited from Philip's explorative study of the rhetorical issues associated with ancient scientific prose. van der Eijk 1997.

¹⁷ van der Eijk 1997, 77-78.

Ultimately, this thesis finds itself in a growing number of studies that attempt to shed light on the ways in which scientific knowledge was communicated in the ancient world. It is my hope that this study will spur on future comparative studies of generic conventions and communicative practices in the Galenic Corpus.

1.2 Methodology

This study examines Galen's genre rhetoric through the analysis of six texts which represent six different kinds of discourse: prolegomenon, commentary, protreptic, isagogic, thesis and the kind of writing commonly identified as a treatise. Ancient terminology, theory and practice, as well as modern genre scholarship, were used as the criteria for identifying these as ancient genres. The selected genres serve to illustrate the common genres (isagogic, commentary, thesis and treatise), as well as some of the unique genres (protreptic and prolegomenon), in the Galenic Corpus. The texts were selected to illustrate Galen's stylistic range (from *Puls.* to *Protr.*) as well as his persuasive techniques within a genre (*HNH*). The conceptual model used in this analysis is derived from linguistic theory which treats genres as goal-oriented communicative events having their own complementary registers.¹⁸ Therefore, my analysis considers the over-arching objective of each type of discourse and breaks each text into the component parts of the communicative triangle: author–audience–message. Recurring points of analysis are the generic information about the social occasion/ rhetorical situation; the presence and role of the audience; the posture (instructor/colleague), identity (artisan/theorician, physician/philosopher, affinity toward different types of collectives and individuals) and presence of the author; the content of the message and the kinds of organizing principles used; the level of explanation and the types of proofs used; and the stylistic register, which includes generic variations in the articulation of sentences and paragraphs as well as the use of technical and non-technical vocabulary. Some points of analysis that are particular to Galen will be touched upon in order to provide information about the nature of each text, i.e. Galen's use of prefaces, autocitations, anecdotes and polemical remarks.¹⁹

¹⁸ This approach has its origins with John Langshaw Austin's 'speech act' theory. Austin 1962. Some of the points of analysis in this study are taken from Hymes' proposed method of analysis of 'speech events', which are defined as recognizable classes of communicative situations. Hymes 1972, 58 ff. cf. Meechan and Rees-Miller 2001. An account of the developments in this linguistic approach to genres of communication, as well as its relationship to literary and rhetorical approaches to genre, can be found in Swales 1990, 33–67. The use of linguistic theory for the analysis of modern scientific and technological communication can be found in Sager, Dungworth and McDonald 1980. The use of such a linguistic approach for the study of ancient scientific texts is put forward in van der Eijk 1997, 83–85.

¹⁹ Peterson 1977.

In regard to the complicated concept of ‘the audience’, I am broadly speaking of those toward whom a discourse is directed.²⁰ I make a further distinction between the ‘ideal’ versus the ‘historical’ audience. Attention is paid primarily to the ideal audience, which is defined as ‘the auditor implied by a discourse [that is] a model of what the rhetor would have his real auditor become’, i.e. the textual audience.²¹ The historical audience—a rhetorical audience with a historically concrete existence—is a less useful concept in the discussion of ancient literature because such information is often a matter of speculation.²² Under the topic of the audience, I also make a distinction between the dedicatee and the addressee. Although a single individual could conceivably play both roles, the dedicatee is, strictly speaking, an individual for whom a work was composed and published. The addressee covers a wide variety of figures in a text. In some cases, such as polemics, the addressee is lifted up as an object of ridicule and scorn for the audience. In other cases, the addressee can be considered the ideal audience. In short, the addressee is a figure to whom the author speaks in the body of the work in order to advance the author’s arguments and to signify a particular relationship between this figure and the author.

In respect to the aforementioned ‘presence’ of the author and audience, this study looks at the frequency, as well as Galen’s usage, of the verbal/pronominal/ adjectival forms of the first/second person plural and singular.²³ Such information is not only useful to understanding the author–audience relationship in each genre, but it also reveals the type of ‘first person-centred rhetoric’ Galen uses in each text to construct his ‘scientific self’.²⁴

A couple of points should be stressed as to the notion of ‘technical’ and ‘non-technical’ language. First, technical language is not so much an indicator of audience-orientedness as it is of the author signaling that he is speaking the language of a ‘discourse community’.²⁵ In other words, because a text contains medical terms, one should not assume that it could not be understood by non-practioners and, subsequently, that the text’s historical audience is restricted to physicians.²⁶ While technical language is one of the defining

²⁰ van der Eijk 1997, 86–89.

²¹ Black 1970, 113.

²² In respect to the historical audience in rhetorical situation, see Bitzer 1968.

²³ van der Eijk 1997, 115–119. I have benefited from the first person analyses used by Prof. Harry Hine in a paper entitled ‘Subjectivity and Objectivity in Latin Scientific and Technical Literature’, which he presented at the Workshop on Greco–Roman Scientific and Medical Writing, 2007.

²⁴ von Staden 1994, 103–104. The egocentric rhetoric of 5th and 4th century BC medico–scientific texts was first put forward in Lloyd 1989, 56–70.

²⁵ The term ‘discourse community’ has been defined by Swales as a collection people who have a suitable degree of ‘relevant content and discourse expertise’, share a ‘common enterprise’, share a set of ‘normative and principle beliefs as to knowledge’, employ ‘one or more genres to communicate its members’ ideas’ and have acquired a ‘specific lexis’. Swales 1990, 24–27. cf. Seager 1988; Goldman 1994.

²⁶ van der Eijk 1997, 86–89.

characteristics of a discourse community,²⁷ one merely has to look at the way in which a physician uses medical terminology to convey information to his patient or to the community abroad as evidence that this type of specialized language primarily signals the author's and the audience's competence. It is well understood that the *pepaideumenoi* of Galen and his coevals' society took an active interest in medical matters. With that said, it is not always a simple matter to determine what is and what is not technical language.²⁸ In addition to terminology, factors such as syntax and style could conceivably be used to indicate a technical language.²⁹ In this study, medico-technical language is recognized at the level of terminology, and whether a term belongs to such a technical lexicon is determined by looking at its use in the language.

1.3 Problems and pitfalls of this study

Genre is a slippery term which easily opens one up to criticisms regardless of the approach taken. Within the fields of study that examine spoken and written language, there are numerous approaches to studying genres of discourse.³⁰ And, certainly, works entitled *The Madness of Genre* or *Integrating Rhetorical and Literary Theories of Genre* reflect a dissatisfaction among scholars with the way in which the term/concept is being used in a field of study.³¹ Likewise, works which are dedicated to criticizing or defending the value of genre studies reveal that this is a tendentious topic.³² Simply expressed, there is no universally accepted 'theory' of genre.

Ancient medical texts have been largely ignored by classicists having been dismissed as 'technical writings' rather than 'literature'. This neglect, coupled with the wide variety of forms of scientific prose and the lack of a unified system of genres in antiquity, leaves us without a systematic account of the relations between ancient scientific texts and genres.³³ In classical studies, genre analysis has been primarily used in the explanation of poetic works in one of two ways: empirical or theoretical.³⁴ The camp that takes an empirical approach often pays an enormous amount of attention to categorizing a piece of poetry according to its formal characteristics. The theorists' approach to poetic literature is more content- or theme-oriented. The specificity of ancient genre terms of poetry, as well as the identification of poetic genres

²⁷ Swales 1990, 24–27.

²⁸ In the first chapter of his systematic treatment of the medical Latin, Langslow presents a variety of issues associated with identifying technical language. Langslow 2000, 1–75.

²⁹ An analysis of the criteria for identifying and characterizing technical terms is discussed in Langslow 2000, 6–26. cf. Langslow 1989, 37–40.

³⁰ Surveys of past and current approaches to genre can be found in Devitt 1993; Frow 2006.

³¹ Mullett 1992; Devitt 2000.

³² White 2003.

³³ van der Eijk 1997, 89–90.

³⁴ Conte 1992.

by their formal features, particularly their meter, illustrates the ancient perspective that poetry is a mimetic art.³⁵ Scientific prose, on the other hand, reflects to a greater extent the pragmatics of everyday discourse. Therefore, I have chosen a model of genre analysis which emphasizes the communicative elements of discourse.

As this is a comparative study, the depth of analysis had to be sacrificed for the sake of breadth. Therefore, my analysis does not include Galen's use of schemes (e.g. assonance, ellipsis and antithesis) and particles because such stylistic features do not necessarily reflect generic conventions. Likewise, questions concerning Galen's use of ancient formal rhetorical theory have not been fully addressed in this study. Furthermore, to facilitate comparisons between the various texts, I have, as was mentioned, tried to standardize the topics of my analysis. This method is not conducive to a fluid rhetorical analysis because it separates corresponding elements of a discourse which were designed to have a synergistic effect on a particular argument. Here again, sacrifices had to be made for the sake of comparison.

Because of the imposed word limit and the scope of this study, comparisons with other Galenic texts and with the works of other authors were not systematically presented in each chapter of my thesis. Such 'controls' are desirable both for situating Galen's writings among his contemporaries' and for drawing firmer conclusions about generic conventions. Comparisons between the language in Galenic texts of the same time frame was another important point of analysis which was regrettably left out of this thesis for similar reasons. Without such comparisons, allowances need to be made for chronological determinants which could possibly account for some of Galen's particular use of language such as idioms and phraseology. Lastly, although equally desirable for strengthening my conclusions, an analysis of Galen's use of 'technical language' was not systematically carried out in this thesis. It is my intention to include all of these important points of analysis in a presentation of this study revised for publication.

As to the question of relevance, one might argue that no author is typical, and certainly, Galen is not. In many respects, this point has merit. However, we must bear in mind that Galen was not writing in a vacuum. And, if we assume that he was an effective communicator—an assumption I believe is borne out by the enormous number of Galenic texts which were preserved and studied for centuries after his death—then his writings reflect some of the ways in which a medical author could convey knowledge.

³⁵ von Staden 1998; Farrell 2003, 384–386.

For the sake of contextualizing Galen's communicative practice, in the following section I will briefly touch upon Galen's rhetorical education as well as his theoretical position on rhetoric and scientific discourse.

II. Medicine and rhetoric in the Galenic Corpus

2.1 Galen's rhetorical education

Galen does not provide us with much information as to his early education. However, one can deduce from his social standing and his comments about rhetoric and grammar that his early education would have been similar to that of Herodes Atticus (AD 101–176) and other children of wealthy *pepaideumenoi*.³⁶ Thus, Galen's grammatical education would have involved readings from the most noteworthy ancient writers, such as Homer and Plato, and he would have been exposed to line-by-line exegesis of some poetical texts. Galen would have been taught the social importance of modeling one's language in respect to the Attic dialect of the authors he was studying, which explains why Galen chose to write in Attic.³⁷ His rhetorical training most likely involved elementary exercises in prose composition, such as the one's described in Theon's (c. 1st century AD) *Progymnasmata*.³⁸ Here, he would have gained experience writing persuasively in forms of prose, such as myth (μῦθος), anecdote (χρεία), maxim (γνώμη), refutation (ἀνασκευή), confirmation (κατασκευή), encomium (ἐγκώμιον), invective (ψόγος), comparison (σύγκρισις), common place (κοῖνος τόπος), description (ἔκφρασις) and thesis (θέσις). Galen's early rhetorical education would have also provided him with 'armfuls of prose and waggonloads of poets' in order to liven up his arguments or to reveal his learnedness.³⁹

Galen's interest in ῥητορική in his adult years is evident in the collection of titles of his works, which he cites in *Lib.Prop.* under the category of Τὰ τοῖς γραμματικοῖς καὶ ῥήτορσι κοινά.⁴⁰ From titles, such as *Political Terms in Aristophanes*, *Collection of Notable Attic Terms* and *Clarity and Unclarity*, it is quite evident that Galen's interest in ῥητορική is related to language rather than persuasive speech. For Galen, ῥητορική, as well as γραμματική, reveals the common usage of a term in Attic Greek. Thus, by knowing the way in which a term was used by the ancients, one was better able to express something in 'pure,

³⁶ Papalas 1981; Brunt 1994, 44–45; Kennedy 1994, 201–208.

³⁷ Wisse 2001.

³⁸ Cichocka 1992; Kennedy 2003.

³⁹ Philostratus, *VS*, 1.539.25–27.

⁴⁰ *Lib.Prop.*, Boudon-Millot 2007a, 173.5.

colloquial, idiomatic Attic'.⁴¹ Διαλεκτική, on the other hand, is used to logically determine what is the best term or definition to signify the nature of something.⁴²

It is unclear to what extent Galen was familiar with the rhetorical handbooks of his time.⁴³ Galen's own treatment of rhetoric in *Lib.Prop.* reveals that he did not devote any writings to the kind of rhetorical theory found in the technical handbooks of rhetoricians. We do find Galen listing the rhetorical terms for the parts of a speech: προοίμιον, διήγησις, πίστεις and ἐπίλογος.⁴⁴ However, these terms were undoubtedly part of the common vernacular of the *pepaideumenoi*, and therefore, they do not reveal that Galen had ever made a serious study of the rhetorical handbooks. To judge from Galen's own writings, it is most likely that his knowledge of rhetorical theory was derived from what philosophical authors had to say about ῥητορική rather than what rhetoricians wrote.⁴⁵

2.2 Galen's perspective on rhetoricians and rhetoric

While Galen sometimes seems to distinguish between an orator (ῥήτωρ) and the rhetorician (ῥητορικός), he generally speaks as if they are one and the same class of people.⁴⁶ He does use the former term to speak about the persuasive practices of court lawyers.⁴⁷ He also expresses an awareness of some of the key orators of his time and their predecessors.⁴⁸ In *CAM*, he uses orators (ῥήτορες) as positive examples of artisans who both know the method of their art and spend their time training themselves in this method.⁴⁹ Nevertheless, his portrayal of orators and rhetoricians in general is negative. His main criticisms are that these men's arguments are not scientific because they deal only in plausibilities and their aim is persuasion rather than knowledge. Many of his remarks aimed at rhetoricians should be understood in the context of his polemics against other physicians. Thus, when characterizing physicians who make a habit of disputing about medical terms, he claims that the practices of orators (ῥήτορες), grammarians and dialecticians have as much to do with the practice of medicine as an 'ass playing a harp'.⁵⁰ Similarly, Galen defines a ῥητορικὸς ἀνὴρ as one who

⁴¹ von Staden 1995b, 516.

⁴² *Di.Dec.*, K. 9.789

⁴³ On the basis of Galen's statement in *PHP* (K. 5.32), which relates how the ῥητορικὰ τέχναι teach the use of *topoi* in hypotheses, Percy concludes that Galen 'had read the rhetoricians' handbooks'. Percy 1993, 449. Likewise, López Férez seems to argue that Galen's use of the terms δεινότης, σαφήνεια and συντομία indicates an awareness of the technical terminology of rhetorical manuals. López Férez 1994, 228–232. Neither of these scholar's arguments proves that Galen had studied the rhetorical handbooks.

⁴⁴ *Thras.*, K. 5.848.

⁴⁵ *Hipp.Epid.* K. 17a.678.

⁴⁶ Percy 1993, 449–450; López Férez 1994, 223–228.

⁴⁷ *Hipp.Prorrh.*, K. 16.689.

⁴⁸ Percy 1993, 449–450.

⁴⁹ *CAM*, K. 1.245.

⁵⁰ *Di.Dec.*, K. 9.789.

uses public opinion to carry his arguments and to obscure the truth.⁵¹ However, sometimes Galen presents a more positive image. For example, he remarks how rhetoricians have made a good study of Lysias and Demosthenes.⁵²

Galen often makes a distinction between rhetoricians (ῥητορικοί), dialecticians (διαλεκτικοί) and sophists (σοφισταί).⁵³ Rhetoricians and dialecticians practice two different arts of argumentation used in disputable matters of words.⁵⁴ Galen's use of the term σοφιστής is invariably pejorative. However, he does not use this term to signify Sophists, as in Philostratus' class of epideictic orators.⁵⁵ Galen also does not use the term to signify an identifiable group in society. Like Plutarch, the pejorative meaning he ascribes to the term echoes the Platonic definition of men who are interested in eristic rather than seeking truth. Thus, these individuals need not be rhetors. Often, 'σοφιστής' is simply used to identify Galen's enemies. Galen's definition of σοφιστής is simply one of many different ways in which the term was used in the 2nd century AD. Furthermore, as will be seen, Galen's concept of sophistic argumentation (σοφιστική) has nothing to do with Philostratus' perception of Sophistic rhetoric. And, for that matter, the notion that there was a distinctive Sophistic rhetoric practiced during the 2nd century AD which can be recognized by certain stylistic characteristics is not borne out by analysis.⁵⁶ Thus, this study will use the term epideictic rather than sophistic for the kind of stylistically ornate language that is primarily used to reveal the erudition of the speaker.

In respect to the two most influential philosophical figures in his works, Galen took a more Aristotelian perspective of ῥητορική rather than holding to the somewhat dismissive notion of ῥητορική expressed in some of the Platonic dialogues.⁵⁷ For Galen, rhetoric was a complete τέχνη that had a method and could be broken down into individual skills.⁵⁸ As was common in his time, he considered rhetoric as being part of a collection of intellectual *technai*.⁵⁹ However, for Galen, rhetoric was of a decidedly lower intellectual status in respect to more epistemic fields of study, such as logic, medicine, architecture, geometry, mathematics and astronomy.⁶⁰ Nevertheless, Galen does not go so far as to demean rhetoric to denote merely flamboyant language and specious arguments. In *Nat.Fac.*, Galen claims that

⁵¹ *Protr.*, K. 1.25.

⁵² *Diff.Puls.*, K. 8.718.

⁵³ Here, 'sophists' is used rather than 'Sophists' to indicate that Galen is not referring to a historical group of orators of the 2nd century AD.

⁵⁴ *Di.Dec.*, K. 9.789.

⁵⁵ Different meanings of the term σοφιστής can be found in Brunt 1994, 48–50.

⁵⁶ Schiappa 1991.

⁵⁷ Percy 1993, 450–452.

⁵⁸ *CAM*, K. 1.245; *Thras.*, K. 5.848.

⁵⁹ *Protr.*, K. 1.39.

⁶⁰ *CAM*, K. 1.245; *Pecc.Dig.*, K. 5.64.

rhetoric is a form of reasoning that deals with plausibilities (πιθανά).⁶¹ Galen points out that certain rhetoricians who are unable to refute an argument resort to ridicule. He goes on to claim that these men do not practice rhetoric because rhetoric uses persuasive reasoning (τὸ διὰ λόγου πιθανοῦ); therefore, an argument without reason (τὸ διὰ λόγου) is a vulgar trick (βωμολοχικόν) and not a rhetorical proof (ῥητορικόν).⁶² In this same section, Galen points out that there are two ways to argue a disputable matter: dialectically (διαλεκτικῶς) and rhetorically (ῥητορικῶς). Here, Galen echoes the sentiment expressed at the outset of Aristotle's *Rhetorica*, namely that rhetoric is the ἀντίστροφος to dialectic. Nevertheless, in most of his works, Galen holds that a physician should avoid rhetorical reasoning in scientific discourse.⁶³

2.3 Galen's theoretical perspective on the epistemological merits of argumentation, language and genre

In *PHP*, Galen puts forward a hierarchical theory of the epistemological merits of four different types of premisses used for proofs: the highest form, scientific (ἐπιστημονική), followed by dialectic (διαλεκτική), rhetorical (ῥητορική) and sophistic (σοφιστική).⁶⁴ Scientific and dialectical premisses are of a higher epistemological order because they deal with the actual attributes of a subject. Scientific premisses are superior to dialectical because they involve the nature of the object (e.g. the φύσις of the heart derived by anatomy) as opposed to the essential, logically derived definitions of the object (e.g. the οὐσία of the heart derived by logic) proven by dialectical premisses. Galen equates rhetorical premisses with common beliefs and the *endoxa* of non-experts (e.g. what Homer has to say about the heart). He considers these types of premisses as dealing with plausibilities as opposed to knowledge, and therefore, they are ill-suited for scientific discourse. Sophistic premisses are merely based on the etymology of words and other clever wordplays. Although he differs from Aristotle's notion of *endoxa* being proper to dialectic, Galen's hierarchy of premisses by and large reflects Aristotelian concepts and terminologies in *Posterior Analytics*, *Topics*, *Rhetoric* and *Sophistical Refutations*.⁶⁵ This theory illustrates some of the interplay between language and knowledge. While the aforementioned theory is put forward to support Galen's criticisms of Chrysippus in *PHP*, one can ascertain, nevertheless, from Galen's other writings that this theoretical model was not constructed *ad hoc* but is a part of Galen's epistemology.

⁶¹ *Nat.Fac.*, K. 2.61–62.

⁶² *Nat.Fac.*, K. 2.61.15–62.2.

⁶³ Percy 1993, 453.

⁶⁴ *PHP*, K. 5.221–228; Percy 1993, 454; Tieleman 1995, 491–493, 1996, 12–23.

⁶⁵ Percy 1993, 454; Tieleman 1995, 490–491.

For Galen, the essence of language is signification. Galen's emphasis on signification as opposed to ornamentation can be observed in his theoretical approach to the lexis of science. Galen's theory of lexis is the notion that a word should as clearly and as closely as possible signify the nature of the object it references. When defining an object with a term, one must have an accurate conception, *ennoia*, of the object. One of the ways in which lexical clarity is accomplished is with 'consistency and rigour', applying a term to one and one thing only.⁶⁶ Another method Galen puts forward for ensuring clarity of meaning is through ordinary Greek usage, by which he typically means Attic. In theory, Galen emphasizes the avoidance of figurative language by the use of 'primary' and 'literal' application of words.⁶⁷ Thus, unlike Theophrastus' notion of the excellence of language being 'good Greek, clarity, appropriateness, and ornamentation', for Galen, the virtues of language are clarity and freedom from ambiguity.⁶⁸ Therefore, it would seem that Galen's content-oriented theory of language leaves little to no room for rhetorical ornamentation.

One of Galen's programs, particularly in his assessment of the scientific nature of Hippocratic texts, was to distinguish between scientific writings and those which are for entertainment, i.e. history and poetic literature.⁶⁹ As Sluiter has illustrated, 'the genres Galen uses as a foil for Hippocrates are poetry, especially Homer, and historiography.'⁷⁰ She points out that, in Hellenistic and Roman doctrine, literary forms were often distinguished in respect to their adherence to truth: 'in declining order of truthfulness they were *ἱστορία* (*fama, verum*), *πλάσμα* (*fictum argumentum, verisimile*) and *μῦθος* (*fabula, falsum*).'⁷¹ Although separating scientific writing from poetry posed no trouble to Galen, history was a different matter.⁷² Galen argues that, unlike scientific writing, historiography's aim is to entertain, and its erudition is inferior in respect to truth criteria.⁷³

In *PHP*, Galen puts forward his position on the epistemic value of poetry in scientific inquiry.⁷⁴ Here, his attack is primarily on the Stoic positions that one could derive philosophical knowledge or adduce evidence from poetry through the method of 'articulation' (*διάρθρωσις*).⁷⁵ The Stoics used opinions of experts and non-experts alike for their dialectical arguments.⁷⁶ Thus, a myth could be farmed for knowledge under the belief that it

⁶⁶ Hankinson 1994a, 171.

⁶⁷ von Staden 1995b, 502–503.

⁶⁸ *Soph.*, K. 14.587–8; Hankinson 1994a, 177.

⁶⁹ Sluiter 1995, 195–196.

⁷⁰ Sluiter 1995, 199.

⁷¹ Sluiter 1995, 201.

⁷² Sluiter 1995, 204.

⁷³ Sluiter 1995, 211.

⁷⁴ A discussion of Galen's approach to poetry in *PHP* and elsewhere can be found in von Staden 1998, 79–82.

⁷⁵ Tieleman 1996, 219.

⁷⁶ Tieleman 1996, 220.

contains hidden fragments of truth.⁷⁷ Galen's criticisms of Chrysippus' use of poetry is directed toward the extent and the way in which it is used in scientific inquiry. For Galen, poetry and non-expert testimony are only ancillary information in scientific inquiry. In other words, they should be used only when something is proven via the aforementioned scientific premisses; they should not take the place of scientific premisses.

This sketch of Galen's theoretical approach to language and rhetoric serves as a backdrop for the following analyses of his communicative practice. From the above, Galen presents himself as an author whose argumentation is restricted to scientific evidence and who takes a utilitarian approach to language and genre.

⁷⁷ Tieleman 1996, 221.

Preserving and Presenting a Scientific Oeuvre:

Prolegomena and De libris propriis

I. Introduction

During the latter part of his career, after he had achieved the highest status a physician could obtain in the Roman Empire—a physician in the Emperor’s retinue—Galen composed two ‘auto-bibliographical’ works: *De libris propriis* (*Lib.Prop.*) and *De ordine librorum priorum* (*Ord.Lib.Prop.*).¹ In the proems to these works, Galen explains their particular aims. He declares *Lib.Prop.* was composed to provide an authoritative list (ἀπογραφή) of his extant books,² and in the case of *Ord.Lib.Prop.*, he claims that this work provides the order (τάξις) in which his works should be studied.³ Although we cannot discount his pragmatic reasons for writing *Lib.Prop.* and *Ord.Lib.Prop.*, we must, as Nutton notes, be aware that ‘no other ancient author was so obviously concerned to ensure his own survival in the manner he would have wished’ as Galen.⁴ This concern for self-preservation, which was possibly accentuated by the sting of having recently lost τὰ πλεῖστα of his writings in the great fire at the Temple of Peace (AD 192),⁵ also explains his desire to write an ἀπογραφή for ‘those who intend to read something of my works’ (οἱ μέλλοντες ἀναγνώσεσθαι τι τῶν ἐμῶν).⁶

Because *Lib.Prop.* and *Ord.Lib.Prop.* contain a significant amount of autobiographical and bibliographical information, modern scholars have used them primarily as historical sources to Galen’s life and his works. And, in these regards, the two works seem useful because Galen provides the dates and circumstances of the audiences to which he wrote. However, one must not forget that *Lib.Prop.* is a rhetorical artefact designed for a specific audience and purpose. As will be seen in this analysis, the autobiographical and bibliographical information Galen presents in *Lib.Prop.* was designed to cast a particular light on his endeavours as a medical author and to provide a sense of interconnectivity and

¹ Where possible, cross references to K. will be included in the footnotes. However, Kühn’s text (K. 19.8–124) for *Lib.Prop.* has notable lacunae, some of which have been recently filled with the discovery of manuscript *Vlatadon* 14 (Boudon 2002, Boudon-Millot and Pietrobelli 2005) and its incorporation into Boudon’s edition, *Lib.Prop.*, Boudon-Millot 2007a, 134–173, which will appear as B. in this chapter.

Lib.Prop. was probably written in the latter period of Galen’s career, sometime after the accession of Septimius Severus (AD 193). Ilberg 1889, 208; 1896, 195–196; Bardong 1942, 639; Boudon-Millot 2007a, 8–10.

² *Lib.Prop.*, B. 134.3.

³ *Lib.Prop.*, B. 134.2–8 = K. 19.8.3–9; *Ord.Lib.Prop.*, Boudon-Millot 2007a, 88.3–6 = K. 19.49.4–7.

⁴ Nutton 1999, 46.

⁵ Galen mentions the fire at the Temple of Peace three times in *Lib.Prop.* (B. 143 = K. 19.19, B. 144 = K. 19.21, B. 166 = K. 19.41). Boudon-Millot 2007a, 198, n. 2. This fire was also the subject of Galen’s *De indolentia*. Boudon-Millot 2007b.

⁶ *Lib.Prop.*, B. 145.15–21 = K. 19.22.18–23.8.

meaning to his writings. *Lib.Prop.* gives us a glimpse not only into how a scientific oeuvre was preserved and presented in the 2nd century AD but also exemplifies Galen's skilful execution of the seemingly banal act of recording one's writings.⁷ Rather than address both *Lib.Prop.* and *Ord.Lib.Prop.*, as is customary in modern scholarship, this rhetorical analysis will focus on *Lib.Prop.* because it has its own distinct aim, formal features and dedicatee.⁸

Lib.Prop. begins with a proem (B. 134.2–136.22 = K. 19.8.3–11.11) in which Galen explains the circumstances that compelled him to list his works.⁹ The proem is followed by a section (B. 136.23–145.25 = K. 19.11.12–23.8) which divides his authorial and editorial activities into three periods: 1) the works composed during his first visit to Rome (AD c. 162–166), 2) the works previously written and given back to him for correction upon his return to Pergamum (AD c. 166–168), and 3) the works composed after his return to Rome (AD c. 169–193).¹⁰ In this chronological account, he presents autobiographical details, which he relates to the composition of individual works. The next section (B. 145.26–173.15 ≈ K. 19.23.9–48.16) provides an extensive list of titles to his works under 16 subject headings or themes, ranging from *Works on Anatomical Theory* (Περὶ τῶν κατὰ τὴν ἀνατομικὴν θεωρίαν) to *Matters Common to Grammarians and Rhetoricians* (Τὰ τοῖς γραμματικοῖς καὶ ῥήτορι κοινά).¹¹ In addition to listing the titles and the numbers of books under each title, Galen occasionally interjects autobiographical and supplemental bibliographical information. *Lib.Prop.* ends abruptly after his list of titles under the last theme, *Matters Common to Grammarians and Rhetoricians*.

⁷ Two noteworthy analyses of *Lib.Prop.* and *Ord.Lib.Prop.* come from Mansfeld and Boudon, who have respectively addressed the communicative context and Galen's presentation of himself in these works. Mansfeld 1994, 117–147; Boudon 2000.

⁸ Boudon-Millot 2007a, 3–23. Although Mansfeld (Mansfeld 1994, 126) suggests that *Ord.Lib.Prop.* and *Lib.Prop.* are 'complementary' works, Galen does not make this connection explicit in *Lib.Prop.* In *Ord.Lib.Prop.*, Galen declares his future plans to write ἡ γραφή of all his books. *Ord.Lib.Prop.*, Boudon-Millot 2007a, 100.19–20 = K. 19.60.8. However, he does not indicate that *Lib.Prop.* was designed to be complementary to *Ord.Lib.Prop.* Rather, he simply reveals that he had plans to write *Lib.Prop.* Galen makes a similar claim at the end of *Ars Med.* where, after listing a large number of his medical treatises, he notes how writing a full account of his works at this time is unnecessary 'since we are intending to speak about all my works at some other time in one or perhaps two books bearing the title *Galen: Concerning my own Treatises*'. ...ὕπερ πάντων γε μέλλοντας εἶναι ἐτέρωθι, καθ' ἓν ἴσως ἢ δύο βιβλία τὴν ἐπιγραφὴν ἔχοντα, Γαληνοῦ περὶ τῶν ἰδίων συγγραμμάτων. *Ars Medica*, Boudon 2002, 392.14–17 = K. 1.411.18–412.2.

⁹ An analytical outline of *Lib.Prop.* can be found in Appendix B.

¹⁰ These periods are clearly marked in the text with the following headings: I. Περὶ τῶν γεγονότων ὑπομνημάτων ἐν Ῥώμῃ κατὰ τὴν πρώτην ἐπιδημίαν, II. Τίνα μοι μετὰ τὴν ἐκ Ῥώμης ἐπάνοδον οἴκαδε παραγενομένω βιβλία παρὰ τινων ἐδόθη τῶν ὑπ' ἐμοῦ γεγραμμένων, III. Περὶ τῶν μετὰ ταῦτα γραφέντων βιβλίων. *Lib.Prop.*, B. 136.23–24, 140.9–11, 141.16. While Kühn does not include these chronological headings and the thematic headings in his text, Boudon argues that there is sufficient manuscript evidence to believe that these paratextual features were a part of the original. Boudon-Millot 2007a, 180–181, n. 4.

¹¹ *Lib.Prop.*, B. 145.26, 173.5.

II. Genre

2.1 *Πίνακες*, prolegomena and the communicative context of *Lib.Prop.*

In respect to its socio-cultural antecedents, *Lib.Prop.* is related to the philological scholarship which gained prominence in Alexandria during the 3rd century BC and at Pergamum in the 2nd century BC.¹² This scholarship focused on understanding, explaining and preserving Greek literary tradition.¹³ In some respects, *Lib.Prop.* resembles the early manifestations of this movement—the Callimachean lists (πίνακες).¹⁴ These types of systematic lists of works were utilized by the libraries of Alexandria and Pergamum to preserve the writings of persons eminent in various branches of Greek culture.¹⁵ From the Callimachean πίνακες onward, the common practice was to provide a brief topical account of the author's life (βίος) followed by an ordered list of titles and the number of books attributed to each title.¹⁶ By listing the titles and length (i.e. βιβλία and στίχοι) of an author's writings, a pinakographer not only authenticated the contents of the author's oeuvre, but also provided an important apparatus for the scholarly activities of editing and interpreting texts. Although there were numerous discrepancies between the lists of ancient pinakographers, these lists were often used as proof that a given work was authentic, which is evinced by Galen when he declares that *Gland.* could not have been written by Hippocrates because 'those who made the lists' (οἱ τοὺς πίνακας ποιήσαντες) did not recognize this work.¹⁷ Naturally, a *pinax* written by the author himself would have been considered definitive by future audiences. And, given the longstanding wrangling in antiquity over the Hippocratic question and its effect on the interpretations of Hippocrates' τέχνη, Galen had a prime example of the pitfalls of neglecting to list what one wrote.¹⁸

By the time Galen composed *Lib.Prop.*, such lists had become an important tool of the learned élite, who are often identified with the terms πεπαιδευμένοι and φιλόλογοι.¹⁹ These

¹² Blum suggests that Aristotle's and his students' interest in philology and literary history, his so-called '*historia litteraria*', influenced the philological endeavors of the Alexandrian grammarians. Blum 1991, 14–94; Richardson 1994. cf. Dickey 2007, 3, n. 1. To what extent this is true is debatable. What is clear is that both grammarians and philosophers, albeit for different reasons, shared an interest in cataloguing the authors and writings of various fields of study.

¹³ Pfeiffer 1968, 123–151; Reynolds and Wilson 1974, 1–37; Blum 1991; Dickey 2007, 3–17.

¹⁴ Regenbogen 1950, 1444–1446; Nutton 1988, 52–54.

¹⁵ Pfeiffer 1968, 128.

¹⁶ Regenbogen 1950, 1420–1426; Pfeiffer 1968, 126–134; Blum 1991, 124–243.

¹⁷ *De humero iis modis prolapsos quos Hippocrates non vidit*, K. 18a.379.9–14.

¹⁸ Manetti and Roselli 1994; von Staden 2002a; 2006; Flemming 2008. q.v. the analysis of *HNH* in Chapter. 2.

¹⁹ In various places, Galen suggests that his writings were recognized by φιλόλογοι. *Lib.Prop.*, B. 134.2–135.6 = K. 19.8.3–9.10; *Prop.Plac.*, Nutton 1999, 54.5–56.11; *Praen.*, Nutton 1979, 100.2–6 = K. 19.630.9–14. As Hanson has pointed out, Galen's use of the term φιλόλογος broadly testifies 'not only to the learning and intelligence these men possess through their training in literature, philosophy, medicine and logical argument,

literati displayed a keen interest in the ancients, particularly the famous discoveries, deeds and writings of the 5th and 4th century BC. Knowledge of such matters was socially important because it demonstrated one's erudition and social standing. Philological scholarship had provided a large body of scholarly works dedicated to recording, categorizing, analyzing, summarizing and expounding upon the great literary works of the past. Nevertheless, even in the pervasive antiquarianism of the 2nd century AD, the writings of the most exceptional coevals and near-predecessors warranted the attention of these learned élites. For such an audience, listing the titles of an author's works had the rhetorical significance of indicating that this oeuvre should be considered an example of Greek learning worthy of the kind of attention that the corpora of οἱ παλαιοί (Hippocrates, Plato and Aristotle) received, as well as the renowned contemporary figures of medical science, such as Lycus, Marinus and Archigenes, for whose writings Galen wrote summaries (ἐπιτομαί) and critical commentaries (βιβλία ἐξηγησίν τε καὶ κρίσιν ἔχοντα).²⁰

There are compelling reasons to believe that *Lib.Prop.* was not designed solely for the purpose of authenticating Galen's writings. Galen reveals his exegetical aims when, for example, he suggests which works should be read first or classifies groups of works as either being necessary (ἀναγκαῖα) or useful (χρήσιμα).²¹ This, coupled with the fact that Galen declares that the provided bibliographical information is for his prospective readers so that they 'will know to distinguish' (εἴσονται διορίζειν) between different types of works,²² signals that he is intent on ensuring his writings are interpreted correctly. With that being said, in antiquity, the difference between authentication and interpretation was not great. Hence, the scholarly activity of determining the authenticity of a work via a process of examining its character, title and date of composition in respect to the available biographical and bibliographical information consequently had ramifications on the way in which a work was perceived and subsequently interpreted.²³

A suitable communicative context for *Lib.Prop.* has been suggested by Mansfeld, who has associated *Lib.Prop.* and *Ord.Lib.Prop.* with the types of introductory works utilized in philosophical schools. This isagogic writings reflects the scholarly manner in which teachers would lead their students through the readings of noteworthy philosophers, such as Plato and

but also to the wide range of cultural values they share with Galen.' Hanson 1998, 24–25. cf. Porphy., *Plot.*, 13.17–20.

²⁰ *Lib.Prop.*, B. 147–154 = K. 19.25–30, B. 159 = K. 19.33.

²¹ *Lib.Prop.* B. 145.26–154.15 ≈ K. 19.23.10–30.4. Appendix B. Mansfeld 1994, 128. Likewise, Porphyry seems to share this concern for creating reading progressions in a corpus when he indicates that his arrangement of Plotinus' treatises gives first place to those which addressed 'easier questions' (ἐλαφρότερα προβλήματα). *Plot.*, 24.

²² *Lib.Prop.*, B. 145.15–25 = K. 19.22.18–23.8.

²³ Blum 1991, 226–239.

Aristotle. Before beginning such readings, teachers addressed an array of preliminary questions, which Mansfeld has termed ‘prolegomena’.²⁴ These preliminary issues ranged from information about the philosopher’s life and doctrines to a formal set of seemingly more philological questions, *schema isagogicum*, such as the reason for the title (αἴτιον τῆς ἐπιγραφῆς), authenticity (γνήσιον), theme or aim (πρόθεσις or σκοπός), use (χρήσιμον), divisions in the work (διαίρεσις εἰς κεφάλαια/μέρη/τμήματα), the order a work should be read (τάξις τῆς ἀναγνώσεως) and to what part of philosophy a treatise belongs (ὑπὸ ποῖον μέρος...ἀνάγεται).²⁵ In the 2nd AD, these sorts of preliminary issues were sometimes addressed at the ‘beginnings’ of commentaries to scientific treatises²⁶ or in self-standing works which introduced the reader to the corpora of famous philosophers, such as the *Prologos* to the Platonic dialogues, which is ascribed to Galen’s Platonist teacher Albinus. Although there was no standard titular formula for such propaedeutic writings in the 2nd century AD, beginning with the mid 3rd century AD, some authors used variations of the formula τὰ πρὸ τῆς (συν)ἀναγνώσεως to indicate they were writing prolegomena.²⁷

However, in *Lib.Prop.* and *Ord.Lib.Prop.*, as Mansfeld aptly points out, Galen ‘does not apply a *schema isagogicum* and only incidentally avails himself to a technical vocabulary’.²⁸ Nevertheless, Galen is clearly concerned with the kinds of preliminary exegetical issues one finds in prolegomena.²⁹ Mansfeld’s contextualization of *Lib.Prop.* and *Ord.Lib.Prop.* as prolegomena, which also should be extended to *Plac.Prop.*, provides an attractive explanation for why these three texts resemble the kinds of propaedeutic writings one finds among the Middle Platonists, such as Thrasyllus (d. AD 36), Albinus (AD c. 150), Alcinous (c. 2nd century AD?), Apuleius (AD c. 125–170?) and Porphyry (AD 235–c. 305). By dedicating individual works to the listing of his own books (*Lib.Prop.*), to providing the order in which his writings should be studied (*Ord.Lib.Prop.*) and to summarizing his own doctrines (*Plac.Prop.*), Galen reveals himself to be an author who is interested in using quite different didactic methods to ensure that his oeuvre would be preserved and interpreted

²⁴ Mansfeld 1994, 117–131.

²⁵ Mansfeld 1994, 10–11, 10–57.

²⁶ Mansfeld 1994, 131–147; Sluiter 1999; von Staden 2002a, 118–119, 128. The inclusion of such bibliographical questions was neither formulaic nor compulsory in medical and philosophical commentaries of the 2nd century AD. Galen and his coeval, Alexander of Aphrodisias, would sometimes begin a commentary without such preliminary remarks. Therefore, during this period, the use of these preliminary questions seems to have been *ad hoc* rather than a requisite practice.

²⁷ This terminological formula can be found in Diogenes Laertius (D.L. 9.41), Origen (*In Ev. Ioann.* 1.88) and Proclus (*In R.* 5.38–9). Mansfeld 1994, 7–8. Another formula for these kinds of works, which Mansfeld brings up, is εἰσαγωγή εἰς. Using Galen as his example, he correctly points out that this titular formula does not always indicate an introduction to an author’s writings but can simply mean an introduction to a subject, such as *Puls.* and *Oss.* Mansfeld 1994, 197–198.

²⁸ Mansfeld 1994, 130.

²⁹ Mansfeld 1994, 130–131.

correctly. *Lib.Prop.* has been favourably compared with the works of Thrasyllus and Porphyry, who each described his respective philosopher's life and provided ordered lists of his writings.³⁰ Galen's aim of creating a τὰξις for his writings in *Ord.Lib.Prop.* evokes the endeavours of his Platonist teacher, Albinus, whose *Prologos* defined, classified and arranged the Platonic dialogues, as well as providing two distinct reading progressions for different types of students—a feature also found in *Ord.Lib.Prop.*³¹ Thus, both of these works provide a curriculum for their respective oeuvre. Introductory doxographical works, such as Alcinous' *Didaskalikos* (*did.*) and Apuleius' *De Platone et eius dogmate* (*dogm.Plat.*), were designed to prepare students for the study of Platonic theory by giving a brief thematic introduction to 'Plato's' doctrines. Similarly, in *Prop.Plac.*, Galen moves through a series of topics, albeit in a far less polished and systematic presentation, providing his audience with the key tenets of his theoretical approach to medical and philosophical problems. Similar in its aims to *Did.* and *Dogm.Plat.*, *Prop.Plac.* was designed to help the beginner to arrive at the right interpretations of Galen's writings.

Although Middle Platonists appear to be at the forefront of writing such propaedeutic works,³² this preparatory focus was not entirely foreign to medicine. Galen's medical teacher, Pelops, is credited with writing a work entitled *Hippocratic Introductions* (Ἱπποκράτειαι εἰσαγωγαί). The exact relation of Pelops' work to the Hippocratic texts is unclear since this text is no longer extant. However, to judge from Galen's remarks as to its contents, Pelops' work seems likely to have served as an introduction to the subject of 'Hippocratic' medicine rather than a prolegomenon to specific Hippocratic works.³³ While Nutton has suggested that the impetus for Galen writing *Lib.Prop.* and *Plac.Prop.* comes from the 'techniques which he had deployed, if not in large part himself developed, in dealing with the multitude of writings that constitute the Hippocratic Corpus',³⁴ the Middle Platonists appear to offer a more attractive explanation as to the origins and aims of the aforementioned Galenic works.

Considering its propaedeutic aims, and given that *Lib.Prop.*'s thematic lists are quite different from the dry πίνακες of grammarians, *Lib.Prop.* is best referred to as a prolegomenon. However, for our rhetorical analysis, a couple of caveats should be made in regard to its communicative context. First, Mansfeld suggests that *Lib.Prop.* and *Ord.Lib.Prop.* are 'complementary' works. While this is plausible, it is not explicitly

³⁰ q.v. pp. 27–28.

³¹ Mansfeld 1994, 4, 120–121. cf. Göransson 1995, 49–52.

³² Tarrant 2007. In regard to Galen's Platonism, see De Lacy 1972.

³³ *PHP*, De Lacy 1980, 6.5.23. cf. *Musc.Diss.*, K. 18b.926. Smith 1979, 69–70.

³⁴ Nutton 1999, 127.

indicated by Galen in either *Lib.Prop.* or *Ord.Lib.Prop.*³⁵ Secondly, partially because of his notion of complementary works, Mansfeld suggests that *Lib.Prop.* and *Ord.Lib.Prop.* are for Galen's medical 'students'.³⁶ One should be careful not to extend this communicative context so far as to perceive *Lib.Prop.* as having been written strictly for medical practitioners. Such a communicative context, as will be seen, is not borne out by the way in which Galen appeals to his audience.

2.2 Rhetorical conventions

As was noted, *Lib.Prop.* has been compared with works written by Thrasyllus and Porphyry.³⁷ In the 1st century AD, Thrasyllus wrote two works introducing the corpora of Democritus and Plato. According to Diogenes Laertius, Thrasyllus entitled his introduction to the Democritean Corpus *Τὰ πρὸ τῆς ἀναγνώσεως τῶν Δημοκρίτου βιβλίων*, and his introduction to Plato's dialogues seems to have had a similar titular form. Diogenes relates how each of these works contained a *βίος* and an ordered list of his writings (*τάξις*). Thrasyllus apparently structured Democritus' writings by placing them into tetralogies (*τετραλογία*), groups of four, just as he did in regard to the Platonic dialogues.³⁸ Unfortunately, both of these works are no longer extant. The earliest extant text (c. late 3rd century AD) of this form of philosophical prose is Porphyry's *Vita Plotini* (*Plot.*). The title of this work, *Περὶ τοῦ Πλωτίνου βίου καὶ τῆς τάξεως τῶν βιβλίων αὐτοῦ*, again attests to the intimate association between the *bios* and the ordering of an author's works.³⁹ True to its title, this work describes the life of Plotinus while paying special attention to his ethical and intellectual character. In the middle of this *bios*, Porphyry presents a chronological order of Plotinus' works which is divided into periods in Plotinus' life (4–6). After the *bios*, Porphyry provides a thematic catalogue of titles of Plotinus' writings arranged in sets of nine (the first ennead comes under the heading *τὰ ἠθικώτερα*, the second ennead appear under *τὰ φυσικά*, etc.). Porphyry claims that the basis for his ordering of Plotinus' treatises follows the theme-oriented approach of previous editors, Apollodorus of Athens (c. 180–125 BC) and Andronicus of Rhodes (c. late 1st century BC), who apparently collected and arranged the corpora of their prospective authors according to their subject matter.⁴⁰ Porphyry notes how Andronicus 'divided the works of Aristotle and Theophrastus into treatises (*πραγματείας*) gathering them together into the same place according to their common themes (*οἰκείας*

³⁵ n. 8.

³⁶ Mansfeld 1994, 4, 117–131.

³⁷ Regenbogen 1950, 1444; Goulet-Cazé 1982, 229–327; Mansfeld 1994, 109, n. 185; Boudon 2000, 131–132.

³⁸ D.L. 9.37, 38, 41, 45; Mansfeld 1994, 58–107.

³⁹ Barnes 2007, 531–533; Sharples 2007, 505–507.

⁴⁰ Porph., *Plot.* 24. Blum 1991, 194–199; Mansfeld 1994, 6.

ὑποθέσεις).⁴¹ While there are obvious similarities between *Lib.Prop.* and the aforementioned works, one should bear in mind that Galen did not attach *Lib.Prop.* to a published collection of his writings. Nevertheless, *Lib.Prop.* lays down the groundwork for any disciples or literati who should choose to take up the task of publishing Galen's writings as a corpus.

As to the medical tradition, no examples exist of these kinds of introductions among Galen's medical contemporaries and predecessors. Whether the famous 2nd century AD editors of the Hippocratic Corpus, Dioscorides and Artemidorus Capito, wrote such an introduction to their editions is unclear.⁴² However, given the longstanding interest of medical exegetes in the Hippocratic Corpus, it is plausible that these scholars may have introduced their readers to the Hippocratic Corpus in a fashion similar to the aforementioned philosophical works. As to the historical relationship between the famous *Vita Hippocratis secundum Soranum* (*VHSS*) and the Hippocratic Corpus, while a form of *VHSS* existed in the 2nd century AD is plausible, there is no evidence to suggest that it was attached to a catalogue or corpus of Hippocratic works during that time.⁴³ Other types of medical texts, however, indicate that the structure of *Lib.Prop.* would not have appeared entirely foreign in the landscape of medical works of the 2nd century AD. The title of a work attributed to Soranus (AD 98–138), *Lives of Physicians and Schools and Writings* (βίοι ἰατρῶν καὶ αἱρέσεις καὶ συντάγματα βιβλία),⁴⁴ suggests that the practice of cataloguing the *bioi* and writings of physicians was a feature of 2nd century AD medical works. Although this text is no longer extant, judging from the title, one can deduce that it resembled the kind of doxographical approach found in Diogenes Laertius' (c. early 3rd century AD?) *Lives and Opinions of those who have Distinguished themselves in Philosophy and the Doctrines of Each School* (βίοι καὶ γνωμαὶ τῶν ἐν φιλοσοφίᾳ εὐδοκιμησάντων καὶ τῶν ἐκάστη αἱρέσει ἀρεσκόντων).⁴⁵ However, these kinds of doxographical writings appear to have been composed primarily to acquaint their audiences with the great names and theories of a subject rather than to prepare the student for a reading of a philosopher's works. Nevertheless, one cannot discount that the combination of *bioi*, doctrines and bibliographical lists also could be used for the purpose of acquiring and studying the works of an individual author.⁴⁶

⁴¹ ...ὁ δὲ τὰ Ἀριστοτέλους καὶ Θεοφράστου εἰς πραγματείας διεῖλε τὰς οἰκείας ὑποθέσεις εἰς ταῦτον συναγαγών. Porph. *Plot.*, Henry and Schwyzer 1951, 24.9–11.

⁴² Smith 1979, 238–239; Mansfeld 1994, 140, n. 258, 182–183, n. 329; Manetti and Roselli 1994, 1617–1633.

⁴³ Pinault notes that *VHSS* was attached to the manuscripts of the Hippocratic Corpus AD c. 1100. Pinault 1992, 6–7.

⁴⁴ *Suda* 1.4 s.v. Σωρανός per Mansfeld 1994, 182.

⁴⁵ D.L., Hicks 1942, 2.23; Mansfeld 1994, 182.

⁴⁶ Mansfeld 1994, 58–59. As to the complex issues associated with term 'doxography', see van der Eijk 1999; Runia 1999; Vegetti 1999.

In regard to the act of authentication, *Lib.Prop.* speaks to the three tasks of a bibliographer described by Blum: ‘1) the critical and historical identification of the works actually written by an author among those that were ascribed to him and to others; 2) their exact description; and 3) the meaningful arrangement of their titles.’⁴⁷ However, unlike a grammarian’s approach to writing stripped-down *bioi* and *pinakes*, *Lib.Prop.*’s autobiographical information and thematic lists provide useful information to aid in the study of Galen’s oeuvre, and furthermore, they are more rhetorical in that they are designed to paint an attractive image of the author and his works.

III. Audience

3.1 The role of the dedicatee

The only audience Galen addresses in *Lib.Prop.* is the dedicatee, Bassus, of whom we know little historically.⁴⁸ After the epistolary proem, Bassus is no longer addressed or referred to, which suggests he is the dedicatee.

Galen addresses Bassus with the term of endearment, *κράτιστε* (most excellent/dearest).⁴⁹ Although this term in late Greek can indicate a specific title (= Lat. *egregius*), Galen is likely addressing Bassus with a straightforward term of affection equivalent to *φίλτατε* (most beloved/dearest) because he uses both of these terms interchangeably for dedicatees who are identified as *ἐταῖροι* in his other works.⁵⁰ The use of such terms of endearment was commonplace in a dedicatory proem to either signify the dedicatee was a person of power whom the author wanted to honour through his work, as in matters of patronage, or to indicate a friendly relationship with an intellectual figure in one’s circle of friends/students.⁵¹ The latter relationship seems to be most probably what Galen is indicating in regard to Bassus. Likely, the audience would also infer that Bassus was an *ἐταῖρος* to whom Galen entrusted his writings, a role Porphyry claims he filled for Plotinus;⁵² however, this role is not made explicit in *Lib.Prop.* Of course, the dedication, and consequently the dedicatee, often had a rhetorical function in scientific writings. In this case, Bassus’ advice serves an important function in that he signifies a prominent figure in Galen’s

⁴⁷ Blum 1991, 196–199.

⁴⁸ Boudon-Millot 2007a, 175, n. 1.

⁴⁹ q.v. n. 62.

⁵⁰ Dickey 1996, 143; Alexander 1993, 50–66. In *MM*, Galen addresses a man by the name of *ἑρῶν* as *κράτιστε* and later as *φίλτατε*. K. 10.1.1, 10.34.17, 10.57.8, 10.78.2.

⁵¹ Alexander 1986, 62–63. cf. *Plot.*, 17.1–15; *Quint.*, *Inst.* 1.6–8.

⁵² Porphy., *Plot.*, 24.

intellectual circle who was keenly interested in Galen's oeuvre, and it also provides a sufficient reason for Galen's writing such a self-oriented work.

3.2 *Ideal audience*

The only explicit indication Galen gives as to his ideal audience comes from the previously mentioned statements directed toward οἱ μέλλοντες ἀναγνώσεσθαι τι τῶν ἐμῶν. These comments portray that he has no firmly established relationship with his prospective readers. Galen does not indicate in *Lib.Prop.* his relationship to the audience by defining them or addressing them. Unlike in many of his other writings, he does not use the second person singular or plural in the body of this work.⁵³ Nevertheless, he seems to portray his ideal audience as readers who are not necessarily students but who want to understand his approach to medicine and philosophy. Given Galen's concern about the unauthorized publication (πρὸς ἔκδοσιν) of his writings,⁵⁴ as well as his insistence on presenting the kinds of autobiographical information his students would have already been aware of, *Lib.Prop.* is best considered as a work that addresses the sorts of philological and exegetical concerns the learned élite had in their endeavours to acquire and systematically study the authentic works of important figures in science.⁵⁵

An indication that Galen has such a general audience occurs at the beginning of *Lib.Prop.*, where he claims that both medicine and philosophy teach (διδάσκειν) 'the greatest and most beautiful subjects of those among men, the sciences (τὰ θεωρήματα)', meaning intellectual studies pursued for their own sake than for simply the practice of medicine.⁵⁶ Thus, he does not emphasize the technical aspect of medical studies. Likewise, medical *facta* are curiously absent from his autobiographical information. Unlike in *Praen.*, a propaganda text fecund with medical *facta* pertaining to his evaluation and treatment of patients,⁵⁷ Galen does not use any such medical marvels to define himself in *Lib.Prop.* The only 'medical' deeds he describes are his public anatomical demonstrations in Rome, which, as von Staden has illustrated, should be viewed in the context of agonistic public displays of intellectual prowess similar to those of epideictic orators.⁵⁸ In *Lib.Prop.* Galen's emphasis on his

⁵³ He does use the second person singular in the prefatory remarks, but in both these instances he is addressing the dedicatee. Appendix C, Table 4.

⁵⁴ As to the meanings of πρὸς ἔκδοσιν, see van Groningen 1963.

⁵⁵ Although it is likely propaganda, Longinus' letter to Porphyry, which the latter relates in *Plot.*, illustrates how the learned élites were interested in acquiring, copying and studying the corpora of respected near contemporaries. *Plot.*, 19.

⁵⁶ τὰ τε μέγιστα καὶ κάλλιστα τῶν ἐν ἀνθρώποις, τὰ θεωρημάτων ἃ φιλοσοφία τε καὶ ἰατρικὴ διδάσκουσιν. *Lib.Prop.*, B. 135.4–6 = K. 19.9.10–11.

⁵⁷ Nutton 1988.

⁵⁸ von Staden 1995a; 1997.

involvement in the sciences is telling. Galen has chosen to emphasize his involvement in the sciences that had a broad appeal, namely anatomical demonstrations and apodeictic logic, to separate himself from other medical and philosophical authors, and thereby to attempt to make his writings more attractive.

In the *bioi* of philosophical figures, aspects of a philosopher's moral–intellectual character were defined through events in his life, and the depiction of the philosopher's reaction to these events served to confirm the noetic value of his teachings. Likewise, much of what Galen has to say about himself in *Lib.Prop.* reflects the moral–intellectual characteristics of his physician–philosopher, a somewhat idealized image that is best defined in works, such as *Opt.Med.* and *CAM* (K. 1.243–245).⁵⁹ To illustrate his scientific *ethos*, Galen chooses specific events in his life and presents them in such a way as to reveal his moral–intellectual character. For example, in a rather long anecdote, he intimates that Marcus Aurelius and Lucius Verus prized his medical skills by their request for his presence on their military campaign into Germany and by Marcus Aurelius' entrusting the health of Commodus to Galen.⁶⁰ These revelations of Galen's social status are tempered by the way in which he portrays his disinterest in such political and public affairs. Thus, Galen depicts himself as being absolutely unconcerned with seeking the favour of the emperor, and the audience is led to believe that Galen was only interested in answering the important medical and philosophical προβλήματα. While, in his other works, Galen quite commonly reveals details 'of his prejudices and private life' to enliven a work or 'to illustrate his superiority',⁶¹ the autobiographical details he presents in *Lib.Prop.* reflect a common image found in philosophical *bioi*, namely that of the consummate seeker of truth who is unmoved by fame and public opinion.⁶² This distinctive *ethos* of truly transcendent figures in philosophy would naturally have a much greater appeal among literati than say his other option, the technician par excellence.

IV. Author

4.1 Περιавтоλογία and Galen's authorial egotism

⁵⁹ Mansfeld 1994, 176–191.

⁶⁰ *Lib.Prop.*, B. 141–142 = K. 19.17–19.

⁶¹ Nutton 1988, 52.

⁶² Boudon points out, in respect to *Lib.Prop.* and *Ord.Lib.Prop.*, that the autobiographical remarks in these works have a 'fonction épistémologique'. They are designed to provide the audience with an image of Galen as 'le bon maître par excellence' in that he embodies 'la perfection qualities morales et compétence technique'. 2000, 119, 133.

The explicit purpose of *Lib.Prop.*, which Galen sets out in the dedicatory proem, corresponds to the previously mentioned use of *pinakes*, namely for the authentication of an author's writings. Galen begins *Lib.Prop.* by declaring, 'Your advice (συμβουλή σου) concerning the cataloguing of my extant books, dearest Bassus, has become evident by an event (ἔργω)'.⁶³ He then describes why this event compelled him to take Bassus' advice. He relates how he witnessed a φιλόλογος revealing that a text entitled *Galen the Doctor* (Γαληνὸς ἰατρός) was pseudonymous. The text had been passed off as an authentic Galenic work by a bookseller to an unsuspecting customer. Galen describes in vivid terms how this literatus, 'having read the first two lines, immediately threw away the inscription, only uttering "this is not the lexis of Galen and this book has been falsely entitled"'.⁶⁴

The point of this entertaining *captatio benevolentiae* and Galen's subsequent remarks is quite clear; his works, and consequently himself, are under attack. Galen claims that the knavery (ῥαδιουργία) of booksellers has reached such a state that 'many men have introduced all sorts of mutilations to my books' (πολυειδῶς ἐλωβήσαντο πολλοὶ τοῖς ἐμοῖς βιβλίοις). He notes how some things in his works have been removed (ἀφαιρεῖν), others have been added to (προστιθέναι), and still other things have been altered (ὑλλάττειν); and furthermore, some of his works have been passed off by others under their own names. His explanation for this problem is twofold. First, many of his early writings were given to friends and students without a title, and unfortunately, these texts later found their way into the hands of others. Secondly, the poor rhetorical and grammatical education of 'the majority of men today who pursue philosophy and medicine' (οἱ πολλοὶ τῶν νῦν ἰατρικὴν ἢ φιλοσοφίαν μετιόντων) has left them 'without the ability to read properly' (οὐκ ἀναγνώσαι καλῶς δυνάμενοι), and therefore, they are easily led astray by devious booksellers.⁶⁵ This somewhat satirical view of the ignorance of his society is used to ingratiate himself with the audience by insinuating that he does not consider them to be so naïve,⁶⁶ and it also supplies a reasonable explanation for why he is compelled to write an account of his own works. In this way, Galen portrays the communicative context of *Lib.Prop.* as being for the sole purpose of authenticating his writings.

⁶³ Ἐργῷ φανερά γεγονεν ἡ συμβουλή σου, κράτιστε Βάσσει, περὶ τῆς ἀπογραφῆς τῶν ὑπ' ἐμοῦ γεγονότων βιβλίων... *Lib.Prop.*, B. 134.2–4 = K. 19.8.3–5.

⁶⁴ ...καὶ δύο τοὺς πρώτους στίχους ἀναγνοὺς εὐθέως ἀπέρριψε τὸ γράμμα, τοῦτο μόνον ἐπιφθεγξάμενος, ὡς οὐκ ἔστιν ἡ λέξις αὕτη Γαληνοῦ καὶ ψευδῶς ἐπιγέγραπται τοῦτ' ὁ βιβλίον. *Lib.Prop.*, B. 134.11–14 = K. 19.9.1–4.

⁶⁵ cf. Lucian, *Ind.* 1.1–1.15.

⁶⁶ In Rosen's presentation at the XIIth Colloquium Hippocraticum entitled *Galen, Satire and the Compulsion to Instruct*, of which he was so kind as to provide me a copy, he suggests that Galen's depiction of the ignorance of his society as being his compulsion to write is reminiscent of the kinds of rhetorical *topoi* often found in satire, particularly Juvenal.

While one cannot rule out the historicity of Galen's remarks,⁶⁷ there are reasons to doubt that he was compelled to write *Lib.Prop.* First, without any mention of the aforementioned reasons, Galen had already expressed his intention to write *Lib.Prop.* in both *Ord.Lib.Prop.* and *Ars Med.*⁶⁸ Secondly, his explanations for why he felt compelled to write *Lib.Prop.* are reminiscent of the techniques used by rhetoricians to avoid censure when promoting themselves. Talking about oneself, or rather praising oneself, without giving offence was a well-recognized subject of rhetoric and ethical philosophy, which fell under the topics of τὸ πρέπον or περιαιτολογία.⁶⁹ As Rutherford notes, 'Most of the περιαιτολογία tradition in rhetoric is the working out of a problem in *decorum* created by a conflict between the social pressure to assert oneself in public and the social criticism of excessive assertiveness'.⁷⁰

The difference between boastfulness and proper self-praise was simply a matter of whether the situation warranted talking about oneself or not. Two reasons were commonly used to justify περιαιτολογία: cogent circumstances forced the speaker/author to praise himself, such as when he has been attacked or slandered, and/or his self-praise was in the interest of others, i.e. presenting himself as an example for others to follow.⁷¹ Hence, one of the common ways in which a rhetorician, or any other man of public prominence, began his περιαιτολογία was to indicate his disdain/disinterest in talking about himself and to claim that he regrettably has been compelled to do so for the betterment of others or in defence of his name. Likewise, Galen has portrayed his compulsion to write an ἀπογραφή as a response to the attacks on his writings, as well as for the benefit of a society of illiterate pursuers of philosophy and medicine.⁷² This suggests Galen is redirecting his audience's attention away from the fact that by writing about himself and cataloguing his writings, he was presenting an

⁶⁷ Galen's repeated concern about the unauthorized publication (πρὸς ἑκδοσιν) of his writings reflects a common lament among ancient authors. van Groningen 1963; Dorandi 2000, 103–126; Boudon-Millot 2007a, 178, n. 4; Plat., *Prm.*, 128.b–c, Cic., *de Orat.*, 20.94, Quint., *Inst.*, § 6–8. The basis for these complaints is that the author wants only the final version to be published. In other words, an unauthorized version is not ready for the general public because it has not been reviewed by one's peers and/or the final corrections have not been made to it. Pliny, *Ep.*, 1.8; D.L., 5.37.

⁶⁸ n. 8.

⁶⁹ Rutherford 1995; Pernot 1998. The most detailed ancient discussion in which the term περιαιτολογία appears is found in Plutarch's (AD 50–120) *De laude ipsius*. cf. Quintilian's (AD c. 35–90) *Inst.* (11.1.15–18). Aside from being a subject of discussion among philosophers and rhetoricians, it was a familiar *topos* in epideictic discourses, such as Aelius Aristides' (AD 117–after 181), *Paraphthegma*. It is plausible that Galen's work entitled *On Slander* (Περὶ τῆς διαβολῆς), which Galen describes as being 'about his own life' (περὶ τοῦ ἰδίου βίου), may be related to this kind of rhetorical περιαιτολογία. *Lib.Prop.*, B. 170.9 = K. 19.46.5–6.

⁷⁰ Rutherford 1995, 201.

⁷¹ Rutherford 1995; Pernot 1998.

⁷² Similar rhetorical techniques are also used in the proems of Galen's other explicitly self-oriented works. *Prop.Plac.*, Nutton 1999, 54.5–57.11; *Ord.Lib.Prop.*, Boudon-Millot 2007a, 88.3–90.22 = K. 19.49.4–52.15. As to dedications and the nature of prefatory remarks in scientific prose, see Janson 1964, 7–41, 83–95; Alexander 1986, 42–101; 1993.

introduction to his oeuvre, an act generally reserved for disciples but not the master.⁷³ While an author citing or listing some of his writings within a text on a similar subject matter is not entirely novel,⁷⁴ there are no examples of a medical or philosophical author dedicating an entire work to a detailed presentation of his own oeuvre.⁷⁵

Galen's egotism, the 'person-centred rhetoric' reflected by his use of first-person statements, is generally quite pronounced even in the context of the agonistic rhetoric that characterizes much of Greek scientific writing.⁷⁶ In *Lib.Prop.*, Galen uses the first person more frequently than in any of his other works,⁷⁷ and he interjects himself into the text in a distinctive way by using almost exclusively the first person singular.⁷⁸ His use of the first person singular should not be simply attributed to a standard way in which he cites his own works. It was entirely plausible for Galen to attempt to create a very impersonal account of his works or to use the first person plural to a greater extent.⁷⁹ By relying on the first person singular, he conveys a very personal sense of authorship in *Lib.Prop.* While the position of 'we wrote X' would be desirable when one is trying to strengthen the veracity of work by suggesting concordance among his circle of friends, in this communicative context, which focuses on the singular figure of the author, such a collective position would be confusing to *Lib.Prop.*'s audience. Thus, he has avoided the ambiguous posture of 'we' to clearly illustrate to his audience that they are to interpret his writings via a singular figure: 'I, the author'. The importance he places on conveying his authorship is also evident in the ways he interjects himself into *Lib.Prop.*'s thematic listing of works, a rhetorical feature that is quite unique in respect to bibliographical *pinakes*. Rather than presenting a dry list of titles, Galen's thematic lists contain autobiographical remarks and first-person introductions, such as 'My opinion on

⁷³ Por., *Plot.*, 24; *Simplic.*, in *Enchirid.*, Hadot 2001, 1.4–7; Blum 1991, 196–199; Mansfeld 1991, 110.

⁷⁴ Cic., *Div.*, 2.1.1–7.10. cf. *Ars Med.*, K. 1.407–412.

⁷⁵ St. Augustine's *Retractationes* (AD c. 427) is the next 'auto-bibliographical' work in antiquity. Bogan 1968, xiii–xi.

⁷⁶ Lloyd 1989, 56–70; von Staden 1994.

⁷⁷ In the body of the text, the frequency of occurrence of the first person singular and plural in *Lib.Prop.* is 2.34 %. In the other works analyzed in this study the percentage is as follows: *HNH* (0.58%), *Foet.Form.* (1.06%), *Protr.* (0.86%), *Thras.* (1.38%), and *Puls.* (0.35%). Appendix C, Table 2.

⁷⁸ Of the total number of occurrences of the first person in the body of the text of *Lib.Prop.* 96% of them are in the first person singular, Galen's reliance on the first person singular is quite distinctive when the aforementioned criterion is applied to his other works: *HNH* (18% are in the first person singular), *Foet.Form.* (60%), *Protr.* (55%), *Thras.* (39%) and *Puls.* (33%). Appendix C, Table 7.

⁷⁹ For example, in *Puls.*, he only uses the first person plural to indicate auto-citations (*Puls.* K. 8.461.2, 478.2), while in *CAM*, his auto-citations are presented with a mixture of first person singular, plural and impersonal constructions, such as 'it was shown in X that...'. (*CAM*, Fortuna 1997, 66.28, 78, 17, 82.20, 82.24, 86.16, 92.3, 92.5, 96.11, 118.1, 126.2). Galen is not averse to using the first person plural to convey authorship, as evinced in *Ars Med.* when he relates how he intends to write *Lib.Prop.* to discuss all the other treatises and commentaries 'we wrote' (ἔγραψαμεν). q.v. n. 8.

the questions of moral philosophy, I have exposed in the following books'.⁸⁰ In this way, he never allows the audience to forget who the author is of this oeuvre.

4.2 Galen's construction of the scientific author

Given that a *bios* was typically used to introduce an author's oeuvre, Galen not surprisingly begins *Lib.Prop.* with a chronological account related to his life. However, when compared to the *bioi* found in other works, such as Diogenes' *Vitae*, Porphyry's *Vita Plotini/Vita Pythagorae* and *VHSS*, the autobiographical information that Galen presents in *Lib.Prop.* is far less formulaic and detailed. Although *Lib.Prop.* presents aspects of his life in a chronological structure (B. 136.23–145.25 ≈ K. 19.11.12–23.8 spans some 30 years of his life (AD c. 162–193), it is not a structured account of his whole life (one that moves from topic to topic covering birthplace, name, family, education, teachers, travels, words, deeds, friends, adversaries, health, pupils, death).⁸¹ The autobiographical information is limited to anecdotes, which support the bibliographical information he is presenting. Thus, in a strict sense, Galen has not written a *bios*.⁸² Nevertheless, he does touch upon some of the topics found in the aforementioned *bioi*. He informs the audience of his Greek heritage by identifying his native city (ἡ πατρίς) as the famous Pergamum;⁸³ he briefly relates aspects of his medical/philosophical education;⁸⁴ he recounts details of his travels;⁸⁵ and he indicates his relationship to noteworthy acquaintances and rivals.⁸⁶ Yet, he completely neglects mentioning fundamental biographical details, such as his private life (health, family upbringing and personal/intimate relationships), which an audience would expect in a *bios*. Furthermore, he leaves out biographical information that would appear particularly fitting for a medical author. Galen does not mention his medical education in Alexandria, which was still viewed as a leading centre of medical knowledge, and he fails to include important events in his medical career prior to coming to Rome, most notably his prestigious appointment by the high priest

⁸⁰ Περὶ τῶν τῆς ἡθικῆς φιλοσοφίας ἐζητημένων ὅσα μοι δοκεῖ, διὰ τῶν ὑπογεγραμμένων βιβλίων ἀπεφηνάμην' ...*Lib.Prop.*, B. 169.13–15 = K. 19.45.9–11.

⁸¹ Hope 1930, 145–167; des Places 1982, 16–17; Pinault 1992, 5–34.

⁸² Misch places *Lib.Prop.* under his rubric of 'autobiography' (Misch 1951, 4, 328). However, as Nutton has pointed out, Galen often provides autobiographical anecdotes in his other works, and this feature in *Lib.Prop.* does not constitute autobiography. Nutton 1988, 52, 54. Furthermore, Galen never identifies *Lib.Prop.* as being his *bios*.

⁸³ *Lib.Prop.*, B. 140–141 = K. 19.16–17.

⁸⁴ *Lib.Prop.*, (Pelops and Albinus: Medicine and Philosophy) B. 140–141 = K. 19.16–17, (Stoic and Peripatetic Philosophers, Galen's father: Geometry, Mathematics, and Arithmetic) B. 163–167 = K. 19.39–43.

⁸⁵ *Lib.Prop.*, (Smyrna) B. 140 = K. 19.16, (Pergamum) B. 140–141 = K. 19.16–17, (Aquileia) B. 141–142 = K. 19.17–18, (Rome 1st) B. 136–140 = K. 19.11–16, (Rome 2nd) B. 140–145 = K. 19.17–23.

⁸⁶ *Lib.Prop.*, (Martialis, a leading anatomist in Rome) B. 137–138 = K. 19.13–14, (Boethus, a man Galen describes as being of consular rank and a Peripatetic) B. 137 = K. 19.13, (Marcus Aurelius, Lucius Verus and Commodus) 141–143 = K. 19.17–19.

of Pergamum to look after the official troop of gladiators.⁸⁷ Therefore, the autobiographical information he relates in the chronological listing of his works is clearly not designed to present a full account of his life. Rather, it is designed to create a sense of coherence between his writings by providing information about the reasons he wrote and its effect on the character of oeuvre. In this respect, the purpose of Galen's chronological account resembles the portion of Porphyry's *Plot.* (3–6) in which Plotinus' biographical information is explicitly related to his writings and where one finds a discussion of Plotinus' authorial *modus operandi*.

Drawing any distinction between what is strictly autobiographical and what is bibliographical in *Lib.Prop.* is problematic, given that Galen makes the relationship between his life events and his writings explicit. The serious attention Galen pays to this relationship creates an indelible image of the author. Thus, in his chronological account, exegetical issues—such as how a work was written (i.e. whether it was dictated or not, was composed over time or at one sitting), its level of composition (whether it was lacking (ἐλλιπές) or complete (τέλειον) in its composition), where and when it was written, the target audience/dedicatee, how it was 'published' (πρὸς ἔκδοσιν) and what was its reception—are all related to events in his life. Unlike the exhaustive thematic lists in the latter part of *Lib.Prop.*, the chronological account contains a very selective presentation of his writings, and therefore, as will be discussed in the section (5.1) on chronological structure, it was designed to introduce the reader not so much to individual texts within his corpus as to the kinds of life events which produced his writings.⁸⁸

Galen presents himself as an author whose writings reflect his careful consideration for the needs of his audiences. One of the fundamental distinctions he makes in his writings is between those works for beginners (οἱ εἰσαγόμενοι) and those for more advanced audiences. This distinction serves to explain why some of his works appear to be neither complete (τέλεια) nor detailed (διηκριβωμένα) accounts of a subject matter.⁸⁹ Of course, these kinds of remarks partially shielded him from the potential criticisms that could be levelled against works that were less refined, since it suggested a variety of explanations for this. Another way in which he accounts for the differences in his writings is by describing with great specificity how individual works were composed. He relates how his isagogic works were unrefined texts that were dictated (ὑπηγορεύθη) with no thought of publication.⁹⁰ They were published without his consent, and therefore, copies (ἀντίγραφα) of these works were later returned to

⁸⁷ Nutton 1993; 2004, 223–224.

⁸⁸ As to Galen's propensity for revealing such auto-bibliographical information, see Hanson 1998.

⁸⁹ *Lib.Prop.*, B. 136.4–22 = K. 19.10.14–11.11, B. 158.2–159.8 = K. 19.32.1–33.13.

⁹⁰ *Lib.Prop.*, B. 136.25–137.20 = K. 19.11.12–12.16. Dorandi 1993.

him for correction (διορθώσεως ἕνεκεν). In his description of the agonistic events which spawned particular works, he notes how an attendee at one of his anatomical demonstrations sent him ‘a man trained in shorthand’ (διὰ σημείων εἰς τάχος ἡσκημένος) so that Galen could dictate to him the contents of this speech.⁹¹ Galen also notes how one of the works, which was published unbeknownst to him, was merely ‘a sort of exercise for myself’ (τι γυμνάσιον ἑμαυτῷ) based on a two-day debate between Pelops and Philip the Empiric.⁹² He describes how he ordered their arguments (εἰς τάξιν καταστήσας) and wrote them down (γράφειν). In addition to this kind of less refined written work, he also indicates that some of his compositions required much time (πολὺν χρόνον) to write (γράφειν); in other words, these were works that were to be signature pieces of scholarship. Hence, he describes how *PHP* and *UP* were dedicated to Boethus, a man of consular rank (ὁ ὑπατικὸς ἀνὴρ) and a practitioner of Aristotelian philosophy (κατὰ τὴν Ἀριστοτέλους αἵρεσιν φιλοσοφῶν).⁹³ Aside from Boethus, Galen generally leaves the members of his target audience nameless. However, he is careful to mark their relationship to him and their place in society, identifying them with collectives, such as friends (φίλοι), beginners (εἰσαγόμενοι), young men at the beginning of their studies (μειράκιοι ἀρχόμενοι μανθάνειν) and disciples (μαθηταί), as well as describing unnamed individuals with terms, such as a Platonic friend (φίλος Πλατωνικός), a friend hostile to Martialis (φίλος ἐπαχθῶς ἔχει πρὸς τὸν Μαρτιάλιον), a classmate (συμφοιτητής), a young man who treats eyes (ὀφθαλμοὺς θεραπεύων νεανίσκος) and a midwife (μαῖα).⁹⁴ Thus, rather than only picking works which situate him among one class of audiences, Galen portrays himself writing to a broad range of audiences. Therefore, in his chronological account, he uses individual works as exemplars both to explain why there is such stylistic diversity in his oeuvre and to create an image of his *modus operandi* as an author.

His concern for presenting his endeavours as an author also bleeds into his thematic presentation of his works.⁹⁵ In these lists, he provides information not only on his approach to various topics but also on his authorial activities within a genre of scientific works, most notably his Hippocratic commentaries.⁹⁶ In his discussion of his Hippocratic commentaries,

⁹¹ *Lib.Prop.*, B. 139.3–9 = K. 19.14.12–17.

⁹² *Lib.Prop.*, B. 140.22–141.3 = K. 19.16.15–17.3.

⁹³ *Lib.Prop.*, B. 139.27–140.8 = K. 19.15.16–16.5.

⁹⁴ *Lib.Prop.*, (φίλοι) B. 135.13, 137.1, 137.22, 159.10, 166.3, 166.6 = K. 19.10.4, 11.18, 13.2, 33.16, 41.5, 41.18, (εἰσαγόμενοι) B. 137.5, 145.27, 145.28, 158.10 = K. 19.12.13, 23.12, 23.13, 32.11, (μειράκιοι ἀρχόμενοι μανθάνειν) B. 136.26 = K. 19.11.17, (μαθηταί) B. 135.18, 136.17 = K. 19.10.4, B. 11.8, (φίλος Πλατωνικός) K. 19.12.15 = 137.15, (φίλος ἐπαχθῶς ἔχει πρὸς τὸν Μαρτιάλιον) B. 139.4 = K. 19.14.14, (ὀφθαλμοὺς θεραπεύων νεανίσκος) B. 140.21–22 = K. 19.16.20, (μαῖα) B. 140.21 = K. 19.19.16.19.

⁹⁵ Appendix B.

⁹⁶ *Lib.Prop.*, B. 159.10–162.11 = K. 19.33.14–37.9.

he identifies two distinct phases in his exegetical activities. He first lists the titles of his commentaries to Hippocratic works (*Aph.*, *Fract.*, *Art.*, *Prog.*, *Acut.*, *Ulc.*, *VC*, Book 1 of *Epid.*) and then informs the audience that these works were written for friends or for his personal study. These commentaries are described as being written during his first stay in Rome, when he did not have copies of other exegetes' commentaries. He notes, therefore, that in these commentaries he confined himself to his own interpretations unless he recalled some error in a commentator's writings which would 'greatly harm those who had trusted their words concerning the practice of medicine' (μεγάλως βλάπτεσθαι περὶ τὰ τῆς τέχνης ἔργα τοὺς πιστεύσαντας αὐτοῖς).⁹⁷

He marks off the second group of commentaries by noting a change in his exegetical approach. He supplies a cogent reason for this change noting that, when he heard someone praising a 'fallacious interpretation' (ἐξηγήσεις μοχθηρά) of one of the Hippocratic *Aphorisms*, he decided that, whenever he composed a commentary, he would not write it for the 'particular knowledge' (ἰδίᾳ ἔξις) of the recipient, but 'with an eye for general publication' (πρὸς κοινὴν ἔκδοσιν ἀποβλέπων).⁹⁸ In this way, he indicates that the latter group of commentaries (*Epid.* Books II, III and VI, *Hum.*, *Vict.*, *Prorrh.*, *Nat.Hom.*, *Off.* and *Aer.*) should be read with the understanding that he was no longer restricting himself to the needs of a specific audience and that this phase of his exegetical activities addressed the errors of other commentators in matters which were not necessarily pivotal to the practice of medicine. Galen's schematization of his exegetical aims is designed to insulate himself from potential criticisms and to provide an exegetical principle which explains a noticeable change in the content of his commentaries.

V. Message

5.1 Chronological structure

Galen puts forward the two exegetical issues addressed by his chronological account. The first issue is 'the time of his life' (ἡ ἡλικία) when he composed a work, and the other is 'the reasons' (ἡ αἰτία) he wrote various works.⁹⁹ As stated earlier, he uses the chronological account to present a sort of snapshot of the different kinds of purposes which produced his oeuvre. His decision to use specific works as examples rather than to list every work explains why in his chronological list he presents a mere 17 of the more than 200 titles that occur in his

⁹⁷ *Lib.Prop.*, B. 160.8–13 = K. 19.34.17–35.3.

⁹⁸ *Lib.Prop.*, B. 160.18–21 = K. 19.35.8–12.

⁹⁹ *Lib.Prop.*, B. 145 = K. 19.22–23.

thematic lists and why these 17 titles represent a diverse array of works and audiences. Hence, in this chronological account, one finds his great signature works, such as *UP*, *AA* and *PHP*, which are dedicated to important figures in society, along with rather obscure texts, such as *Anatomy of the Womb* (μήτρας ἀνατομή), a work he calls a tiny little book (μικρὸν βιβλιδίον) given to an unnamed midwife (μαῖα) while he was studying medicine.¹⁰⁰ His chronological account links a variety of different events to the titles of specific works, and in this way, one can observe him presenting examples of the kinds of αἰτίαι which compelled him to write.

But, what of ‘the time of his life’ (ἡ ἡλικία)? How does listing a mere 17 titles help explain at what time the other 200 or more works were written? Surely, he recognized that the audience would have no way of knowing when the rest of these works were written.

To understand what Galen is trying to accomplish in his chronological account, one should first look at how the ἡλικία of an author was used in discussions of the authenticity and the character of an author’s writings. In *Plot.*, Porphyry explains why he has grouped the works of Plotinus into three chronological periods: his early life (κατὰ ἡλικίαν), during Plotinus’ zenith (ἀκμάζοντος) and when Plotinus’ body was failing (ὑπὸ τοῦ σώματος καταπονουμένου).¹⁰¹ He notes that Plotinus’ intellectual prowess differed at each stage in his life, and consequently, Plotinus’ works also differed in their character. Likewise, the author of *VHSS* notes how there is considerable disagreement as to the authenticity of Hippocratic texts,¹⁰² to which he claims one of the reasons for the apparent discrepancies between works is διὰ τὴν ἡλικίαν. He remarks that the time of life in which Hippocrates wrote explains why some works were more robustly (ῥωμαλεώτερον) written and other works were more feebly (ἀσθενέστερον) written.

Galen has structured his chronological account to reflect this exegetical principle, ἡ ἡλικία of the author, and he offers thereby an explanation as to why his earlier works differed from those after his return from Rome. His evolution as a writer is quite palpable in this chronological account. As noted, he divides this account into three periods representing three different phases in his literary production. During the first period, his first stay in Rome, he describes his writings as being *ad hoc*, claiming that he wrote simply to meet the particular aims of individuals, thus suggesting he had no designs on developing a fixed system of thought via these works. During the second period, after his return to Pergamum, he relates how he began to collect—or, as Galen phrases it, ‘received’ (δόθῃναι)—works written before

¹⁰⁰ *Lib.Prop.*, B. 140.17–22 = K. 19.16.9–14.

¹⁰¹ *Porph. Plot.* 6.25–35.

¹⁰² *VHSS*, Ilberg 1927, 13.1–14.1. cf. Pinault 1992, 8, 128.

his first trip to Rome. He claims during this period he became aware that his works were being distributed to those outside his intended audience.¹⁰³ The third period, his return to Rome, marks a distinctive change in his approach to his writings. He notes:

Now during this time [i.e. when he was in Rome tending to the Marcus' Aurelius son, Commodus] I collected (συνελεξάμην) and brought into a firm understanding (εἰς ἕξιν μόνιμον) all that I had learned from my teachers and the things I myself discovered, and while I was still investigating some matters, I wrote about many of my findings involving myself in many medical and philosophical questions.¹⁰⁴

He also indicates that the third period is when he began to correct (διορθοῦν) and ascribe titles (ἐπιγραφαί) to many of the works written prior to his second stay in Rome.¹⁰⁵ In this way, he establishes a decisive point in his life—a point when his thoughts and writings were being brought into a coherent character.

With that being said, Galen never implies that the theories in his early works were incorrect. Rather, he simply suggests they were expressed in perhaps a less refined or detailed way, which is evident when he remarks how he was astonished that ‘many men possessed’ (εἶχον οὐκ ὀλίγοι) one of his polemical works dedicated to a friend and written while he was a νέος, ‘still in my thirty-fourth year’ (τέταρτον ἔτος ἄγων καὶ τριακοστόν).¹⁰⁶ His emphasis on his age not only serves to illustrate that his genius was recognized before he became firmly established in Rome but also to suggest that his writings changed when he became a public figure in Rome. Ultimately, Galen has provided the audience with a periodic image of his authorship. The audience is to apply this information to the titles not listed in this chronological account. Thus, when they ran into a work that appeared less refined, they could attribute it to an earlier period in his writings. This seems to explain why at the end of this chronological account, as was noted earlier, he claims that ‘from these things’ (ἐκ τούτων) his prospective reader ‘will know to distinguish’ (εἴσονται διορίζειν) between different groups of works, namely those partially (ἐλλιπῶς) versus completely (τελέως) written, and works for teaching (διδασκαλίαι) versus refutations (ἔλεγχοι).¹⁰⁷

¹⁰³ cf. *Plot.*, 3–6.

¹⁰⁴ κατὰ τοῦτον οὖν τὸν χρόνον συνελεξάμην τε καὶ εἰς ἕξιν ἡγαγον μόνιμον ἃ τε παρὰ τῶν διδασκάλων ἐμεμαθήκειν ἃ τ' αὐτὸς εὗρήκειν, ἔτι τε ζητῶν ἑνία ἃ περὶ τὴν εὔρεσιν αὐτῶν εἶχον ἔγραψα πολλὰ γυμνάζων ἑμαυτὸν ἐν πολλοῖς προβλήμασιν ἱατρικοῖς τε καὶ φιλοσόφοις, . . . *Lib.Prop.*, B. 142.25–143.2 = K. 19.19.10–15.

¹⁰⁵ *Lib.Prop.*, B. 136.25–137.4 = K. 19.11.12–12.2. cf. Quintillian's remarks to a publisher named Typho in *Inst.*, Russell 2001, 51, 54–57.

¹⁰⁶ *Lib.Prop.*, B. 139.9–17 = K. 19.14.17–15.4.

¹⁰⁷ *Lib.Prop.*, B. 145 = K. 19.22–23. Mansfeld has argued that Galen's division between teaching (διδασκαλίαι) and refutations (ἔλεγχοι) recalls the Middle Platonists' bipartite division of Plato's dialogues: ‘those for

5.2 Thematic structure

As to Galen's thematic account of his writings, the extensive list of titles which occurs after his chronological account, it is important to recognize that Galen had options as to how to carry this out.¹⁰⁸ Bibliographical lists could vary from rather unorganized to structured lists of titles. The typical methods of structuring were alphabetical (κατὰ στοιχείον), numerological (i.e. tetralogies, trilogies and enneads), thematic (ὑποθέσεις), by character/type (κατὰ γένος/εἶδος) or a combination of these. Judging from the lists in D.L., which are clearly derived from previous *pinakes*, a wide variety of these methods was used for philosophical works.¹⁰⁹ In general, of the various methods of structuring a list, a rough alphabetical listing of titles was more in line with the bibliographical practices of grammarians, while philosophers generally favoured thematic and numerological listings of titles. The latter two formats seem to have been used as aids for systematically studying a philosopher's writings.

In addition to titles, these lists sometimes provided bibliographical information, such as the incipit (αἱ ἀρχαὶ τοῦ βιβλίου), the number of books (βιβλία) and the total number of lines (στίχοι) in the corpus of an author.¹¹⁰ These types of bibliographical information naturally were for the acquisition and the subsequent copying of an author's works as the length and incipit could be checked to determine the authenticity of a manuscript. The listing of titles also provided useful exegetical information about the 'genre', topic and dedicatee/audience.

Galen's thematic lists are not uniform in their presentation of the previously mentioned bibliographical information. The headings for each list differ in the titular format, varying from [τὰ πρὸς X] to [περὶ X]. He loosely follows the rhetorical convention of listing the title first, followed by the book numbers. For example, in D.L., the presentation of titles and numbers of books generally occurs as such: Ἀναλυτικῶν προτέρων α β γ,

instruction and those for inquiry'. Mansfeld 1994, 58–107, 128–129. While Galen's propensity for presenting bipartite divisions (necessary (ἀναγκαῖα) works versus useful (χρήσιμα) works, works for the teaching of beginners (τῶν εἰσαγομένων διδασκαλία) versus works for the teaching of those thoroughly studying the whole subject (τῶν ἐκδιδασκομένων ἅπαντα τελέως διδασκαλία) and public (τὰ πρὸς ἐκδοσιν) versus private (ἴδια) works) in his writings is evident in *Lib.Prop.* (B. 145.26–154.15 ≈ K. 19.23.10–30.4, B. 158–159 = K. 19.32–33, B. 159–162 = K. 19.33–37), his thematic listing in no way reflects the ordering of the Platonic dialogues by their character. With that being said, the importance Galen places upon private versus public works has much to do with the way in which philosophical corpora were presented.

¹⁰⁸ Blum 1991, 182–210; Mansfeld 1994, 58–107. As to some of the general structuring techniques used by Galen in his other works, Flemming puts forward four general patterns: corporeal (*a capite ad calcem*), thematic and two more 'literary types'—phrase-by-phrase, which she associates with commentaries, and alphabetical (κατὰ στοιχείον). Flemming 2007, 247–253.

¹⁰⁹ Blum 1991, 199–202. The more obviously structured accounts in D.L. occur at 3.50–62, 5.86–88, 6.15–18, 6.80, 7.189–202, 9.45–49. Many of the other lists do not have an obvious organizing principle.

¹¹⁰ *Plot.*, 4; Blum 1991, 157–158.

Ἀναλυτικῶν ὑστέρων ἀ β γ δ ε ϛ ζ, Περὶ ἀναλύσεως συλλογισμῶν α'.¹¹¹ But, in *Lib.Prop.*, the list is more varied with ellipses and different titular schemes: Περὶ τῆς κατὰ Χρυσίππου λογικῆς θεωρίας τρία, τῆς Χρυσίππου συλλογιστικῆς πρώτης ὑπομνήματα τρία, δευτέρας ἔν... ὅτι ἡ γεωμετρικὴ ἀναλυτικὴ ἀμείνων τῆς Στωϊκῶν ἔν.¹¹² Similarly to some of the titles in the *pinakes* of D.L., Galen also reveals the 'genre' of various works with terms such as ἐπιτομή, πραγματεία, ὑπομνήματα, ὑποθήκη, σύνοψις, εἰσαγόμενον, προτρεπτικός, ὑποτυπώσεις, ἐξήγησις and σύνγραμμα.¹¹³ As was touched upon earlier, what makes Galen's listing method distinctive from those of D.L. and *Plot.* are the bibliographical glosses, autobiographical anecdotes and didactic information he intermittently introduces into his lists. In these lists, one finds him outlining the chapters of his ἐπιτομαί of Marinus and Lycus' anatomical treatises,¹¹⁴ responding to critics by explaining why he left out certain material in *Puls.*¹¹⁵ or revealing information as to the aims and audiences of various works.¹¹⁶ Therefore, *Lib.Prop.*'s presentation of his writings is more fluid and informative than conventional methods. These rhetorical features reaffirm that his work was not designed to be an inventory for a public library, as were the aforementioned Callimachean *pinakes*. Galen's decision to use a thematic structure, coupled with his rhetorical presentation of his 'life' in the chronological account, clearly has more in common with the way in which philosophical corpora were presented.

The organizing principles Galen uses to structure his thematic account of his works simply are not paralleled among the *pinakes* and prolegomena. First, an obvious division is made apparent among medical, philosophical and rhetorical/ grammatical themes.¹¹⁷ The medical works are further broken down into writings associated with component parts of medical theory, such as works on anatomical theory and works for understanding the therapeutic method. This is followed by thematic lists of Galen's commentaries, summaries and polemics, which are divided further according to the major figures and sects within

¹¹¹ D.L., Long 1964, 5.42.4–5.42.6.

¹¹² *Lib.Prop.*, B. 172.5–10 = K. 19.48.11–16.

¹¹³ The polysemous nature of these terms does not always indicate a specific genre of prose. von Staden 1998. The following are based on TLG searches: *Lib.Prop.*, (ἐπιτομή) K. 19.25.10, 25.12, 27.6, 28.12, 29.12, (πραγματεία) K. 19.20.1, 20.10, 21.1, 28.21, 30.12, 31.9, 31.13, 32.9, 33.3, 33.12, 37.16, 37.17, 41.11, 43.9, (ὑπομνήματα) K. 19.10.7, 11.14, 22.2, 27.5, 31.18, 33.15, 33.20, 34.16, 35.4, 35.13, 36.8, 36.11, 37.14, 37.17, 38.13, 38.18, 41.17, 42.6, 42.8, 42.15, 42.18, 43.5, 43.7, 46.15, 47.3, 47.4, 47.6, 47.7, 47.8, 47.9, 47.11, 47.18, (ὑποθήκη) 19.31.8, (σύνοψις) K. 19.11.7, 33.10, 38.20, 45.4, 46.18, (εἰσαγόμενον) K. 19.11.12, 12.3, 12.13, 23.12, 23.13, 32.11, 32.14, 32.19, 33.7, (προτρεπτικός) K. 19.38.19, (ὑποτυπώσεις) K. 19.11.5 12.18, 38.15, (ἐξήγησις) 19.33.12, 34.10, 35.9, 36.5, 37.2, (σύνγραμμα) 19.33.17, 36.15.

¹¹⁴ *Lib.Prop.*, B. 147–154.

¹¹⁵ *Lib.Prop.*, B. 158–159 = K. 19.32–33.

¹¹⁶ *Lib.Prop.*, B. 159–162 = K. 19.33–37.

¹¹⁷ Appendix B.

medicine. This process is essentially repeated for his philosophical writings but not for his works on rhetoric and grammar.

As to his component parts of medical theory, the first five medical themes (**anatomical theory, faculties and use of the parts, therapeutic method, therapeutics and prognostic works**), in respect to the thematic categories in Boudon's text, are not according to any recognizable popular notion of the εἶδη of medicine, as in D.L. 3.85. They do not reflect the tripartite theoretical divisions of medicine Galen describes in *Ars Medica* and *CAM*.¹¹⁸ Furthermore, the themes and order in *Lib.Prop.* only loosely resemble those found in *Ord.Lib.Prop.* and *Ars Medica*, all of which suggest *Lib.Prop.*'s thematic lists were constructed *ad hoc*.¹¹⁹ However, *CAM* does provide clues to the organizing principle behind *Lib.Prop.*'s divisions of medicine.

In this work, Galen attempts to theoretically construct the practice of medicine based on the analogy that the body is like a house and the doctor is like a man who repairs the house. As the analogy goes, first the doctor must know the structures of the body before he is able to understand the art of repairing it. Thus, Galen describes how the art is understood by first grasping the anatomy and function of the observable parts (Chap. 1–6), as well as those parts which are not observable (Chap. 7–10)—**anatomical theory, faculties and use of the parts**. With this knowledge, one can begin to recognize what is diseased/dysfunctional and the general methods used to correct it (Chap. 11–12)—**therapeutic method**—which facilitates development of specific diagnostic theories and remedies (Chap. 13–16)—**therapeutics**. With this being understood, one should lastly progress to an understanding of prognosis (Chap. 17)—**prognostic**. Hence, in *Lib.Prop.*, Galen's thematic categories reflect a similar progression, suggesting that his thematic listing is implicitly isagogic and that it represents his philosophical approach to constructing the art of medicine. Nevertheless, unlike *Ord.Lib.Prop.*, he does not explicitly indicate that these divisions form a didactic progression.

As to Galen's list of thematic parts of philosophy, *Lib.Prop.* contains only two thematic lists, philosophical demonstrations and moral philosophy. Thus, he has noticeably neglected one of the well-recognized parts of the tripartite divisions of philosophy, namely physics.¹²⁰ The reason for this omission is a matter of speculation. Perhaps, he was trying to express medicine's command of this subject. In other words, to add a section on physics would suggest that there is something deficient in medicine's approach to the study of φύσις.

¹¹⁸ As to the tripartite and other similar methods of dividing the parts of medicine in ancient works, see von Staden 1989, 89–109.

¹¹⁹ Boudon-Millot 2007a, 16.

¹²⁰ In *Opt.Med.* (K. 1.60–61), he recommends physicians study all of philosophy, which he divides into logic/ethics/physics.

Or, perhaps the omission was simply a matter of avoiding the redundancy of having to cite works already listed under his medical themes. Whatever the case may be, Galen's lists are categorical presentations of the didactic ideals he held as being germane to theoretical medicine.

His thematic headings, conversely, are also a means of self-presentation. Rather than simply listing his works, he uses his thematic headings to illustrate the diverse array of topics/themes he addressed in his writings. By demonstrating that he has written on medicine, philosophy and grammar/rhetoric via these thematic lists, he clearly displays his *παίδεια*. As previously noted, his lists of writings under the five *εἶδη* of medicine are followed by five thematic lists of his writings on medical figures and sects, namely works on Hippocrates, Erasistratus, Asclepiades, Empiricists and Methodists.¹²¹ Likewise, one finds him drawing a distinction between his philosophical theories and the secondary literature he devotes to important philosophers/sects: Plato, Aristotle, Stoics and the philosophy of Epicurus. This distinction between his theory and his works on others' theories is a rather unique feature among *pinakes*. The explanation for using this structuring feature comes from *On Examining the Best Physician* and *The Best Doctor is also a Philosopher*.¹²² In these works, Galen provides his audience with a list of qualities of a good physician. *On Examining the Best Physician* is a work directed toward the Roman upper classes, who were interested in medicine and could afford to choose their personal physician.¹²³ In this work, he puts forward his checklist for picking a good physician. In addition to being able to demonstrate a firm understanding of anatomy and prognosis, Galen claims that a good physician should have a well-rounded knowledge of medical authors, paying particular attention to Hippocrates.¹²⁴ Likewise, in *The Best Doctor is also a Philosopher*, Galen states that a good physician must have an understanding of the three fields of philosophy.¹²⁵ Thus, *Lib.Prop.*'s headings attest to his model of an ideal physician, which is clearly based on himself. And, by thematically separating his approach to medicine and philosophy from those of the sects and famous individuals in these fields of study, he emphasizes that his position on these subjects is theoretically distinct. In this way, the mantra found in many of his works, including *Lib.Prop.* is echoed: he does not slavishly follow any one sect or individual, but instead, he takes the best from each. And, therefore, Galen's lists of works effectively portray him as a transcendent figure in medicine and philosophy.

¹²¹ Appendix B.

¹²² Nutton 1990.

¹²³ Nutton 1990, 243–244.

¹²⁴ Nutton 1990, 244–249.

¹²⁵ n. 120.

VI. Conclusion

Rather than leave the survival of his works to chance, Galen carries out this rhetorical act in the scholarly and didactic fashion used for philosophical corpora. Quite clearly, Galen has put some thought into how he was going to present himself and his writings in *Lib.Prop.* His autobiographical anecdotes not only convey important information as to his *modus operandi* as an author, but they also present him as a transcendent figure in medicine and philosophy. Instead of simply listing the titles of his works, he uses a thematic structure that reflects his theoretical approach to medicine. Having such a *pinax* was of practical value not only to the acquisition of Galen's writings, something which only the learned élite could afford to do, but it also provided an apparatus enabling them to thematically study his writings. With such an ordered list, a reader, when faced with an ambiguous passage in one of Galen's texts, could now look to other similar authentic works within Galen's oeuvre to shed light on Galen's probable opinion.¹²⁶ However, *Lib.Prop.* is not merely a set of ordered lists of titles but a work intimately connecting the author to his writings. In a scientific culture where one's perception of 'the author' played a pivotal role in the exegesis of his writings and where the exegetes of Plato, Aristotle and Hippocrates tried to uncover and explain the author's λόγος or τέχνη, the image that Galen created for himself and his writings in *Lib.Prop.* would be of central importance to the preservation and future interpretation of his oeuvre.

¹²⁶ Cic., *De inv.* 2.117; Galen, *Dig.Puls.*, K. 8.958.6; Mansfeld 1994, 148–150; von Staden 2002a, 124–136.

Interpreting Medical Texts:

Commentaries and *In Hippocratis de natura hominis commentarii II* and *In Hippocratis de salubri victus ratione commentarius*

I. Introduction

As was pointed out in the previous chapter, the interpretation of scientific texts was one of Galen's great preoccupations,¹ and this 'secondary' literature, which was devoted to the writings of philosophers, physicians and literary figures—both his predecessors and coevals, was a defining feature of his oeuvre.² The kind of exegetical prose that will be addressed in this chapter was identified by Galen as a 'word-for-word exegesis' (ἐξήγησις καθ' ἐκάστην αὐτοῦ λέξιν),³ which we term a running commentary. This rhetorical analysis will discuss Galen's three books of *commentaria* appearing in Mewaldt's edition with the titles *In Hippocratis de natura hominis commentarii II* (HNH) and *In Hippocratis de salubri victus ratione commentarius* (Hipp.Vict.). All three books of commentary were related to a single exegetical act, the interpretation of the received text entitled Περὶ φύσεως ἀνθρώπου.⁴ One could argue that these highly rhetorical commentaries are not the best

¹ A modified version of this chapter will appear in the proceedings from the XIIIth Colloquium Hippocraticum. I would like to thank Prof. Dean-Jones, as well as the participants of the colloquium, for their critical and insightful remarks, which contributed to the formulation of this chapter. I have also benefited from Jouanna's discussion of HNH. Jouanna 2000.

The Greek text is from Mewaldt's *In Hippocratis de natura hominis commentaria tria* (Mewaldt 1914, 1–113 = K. 15.1–223), which will appear as M. in this chapter.

² *Lib.Prop.* contains an impressive list of philosophical authors (Aristotle (K. 19.47), Plato (K. 19.46), Theophrastus (K. 19.47), Chrysippus (K. 19.47), Eudemus (K. 19.47) and Epicurus (K. 19.48)) and medical authors ((Erasistratus (K. 19.37–38), Archigenes (K. 15.33), Asclepiades (K. 19.38), Theodas (K. 19.38), Menodotus (K. 19.38), Serapion (K. 19.38), Marinus (K. 19.25), Lycus (K. 19.25) and 'Hippocrates' (K. 19.33–38)), as well as literary authors (Aristophanes (K. 19.48), Eupolis (K. 19.48) and Cratinus (K. 19.48)) to which Galen wrote secondary literature. While the exegetical character of these writings is impossible to fully assess given that many exist only in title or in *fragmenta*, the surviving material provides a good sample of his exegetical practices in a variety of secondary literature, which we term *lexica*, commentaries and summaries. Sluiter 2000; Flemming 2008, 232–332.

³ A discussion of Greek terms related to running commentaries can be found on p. 52.

⁴ Although Galen uses HNH from Hipp.Vict. to indicate that he is commenting upon two different treatises, the *Lesersführung*, his transitional statement, at the end of Book 2 of HNH evidently shows Hipp.Vict. is part of the same exegetical act. Here, Galen prepares his audience for the next part of his exegetical reading by saying, 'Now leaving these interpolations behind, let us turn to the book *On Healthy Regimen*, which they say is a treatise by Polybus.' ἀπολιπόντες οὖν ἤδη τὰ παρεγγεγραμμένα ταῦτα μεταβώμεν ἐπὶ τὸ Περὶ διαίτης ὑγίεινῆς, ὃ Πολύβου φασὶν εἶναι σύγγραμμα. However, there is reason to believe that Hipp.Vict. was written quite sometime after he had finished HNH because in *Lib.Prop.*, Galen makes no mention of Hipp.Vict., but he does claim that he wrote two books of commentary on Περὶ φύσεως ἀνθρώπου. *Lib.Prop.*, Boudon-Millot, 161 = K. 19.36. His reason for portraying HNH and Hipp.Vict. as being a part of the same exegetical reading was to indicate that he was following the contents of the received text for Περὶ φύσεως ἀνθρώπου, which included the text we commonly term *De salubri victus* (*Salubr.*). The received text that he was using probably came from Artemidorus Capito's and Dioscorides' 2nd AD editions of the Hippocratic Corpus. HNH, M. 13–16, 57–58, 89 =

selections for analysis because they are unrepresentative of Galen's general exegetical practices. They were chosen simply because they display his skill in using the formal features of this genre to convey his message.

In a culture where philosophical and medical commentators turned to the corpora of their progenitors to uncover and demonstrate the principles of their professions, Galen thought it was extremely important that *De natura hominis* (*Nat.Hom.*) be perceived as having been written by Hippocrates.⁵ He argued that *Nat.Hom.* was the only text in which Hippocrates methodically investigated the primary substances of the human body, its φύσις, and therefore that it contained the 'foundation' (κρηπίς) of the whole art of Hippocrates.⁶ Galen often presents *Nat.Hom.* as proof that his own theoretical views on the four elements and humours were in harmony with those of Hippocrates.⁷

The received text presented Galen with a number of exegetical problems. First, there was a strong contingent of contemporary scholars who maintained that Hippocrates' pupil and son-in-law, Polybus, was the author of *Nat.Hom.*, and these men could point to a long tradition extending to the 4th century BC which declared that *Nat.Hom.* was written by Polybus.⁸ Secondly, although *Nat.Hom.* presented a systematic physiological model of the four humours, it does not explicitly argue for the four elements being the φύσις of man, as Galen had previously claimed in *Hipp.Elem.* Thirdly, not all of the theories presented in the received text agreed with Galen's understanding of medical science, most especially, the antiquated model of human anatomy in Chapter 11 of *Nat.Hom.*⁹ Therefore, Galen was faced

K. 15.21–26, 108–111, 174–175; Manetti and Roselli 1994, 1617–1633; Hanson 1998, 44–46; Nutton 2004, 207–208.

⁵ Sorabji 1990; Sharples 1990; von Staden 2002a; 2006; Flemming 2008.

⁶ *HNH*, M. 8.20 = K. 15.11.14. Jouanna 2000, 290.

His commitment to *Nat.Hom.*'s Hippocratic authorship is obvious from the apparent title of one of his lost works, In 'The Nature of Man' Hippocrates is Observed Holding the Same Opinion in Respect to his Other Treatises ('Ότι καὶ κατὰ τὰλλα συγγράμματα τὴν αὐτὴν δόξαν ὁ Ἱπποκράτης ἔχων φαίνεται τῇ κατὰ τὸ περὶ φύσεως ἀνθρώπου. *HNH*, M. 56.4–6 = K. 15.107.3–5. cf. *Lib.Prop.*, Boudon-Millot 2007a, 161.18–20 = K. 19.36), and from his detailed discussion of *Nat.Hom.*'s authenticity in *On the Legitimate and Spurious Treatises of Hippocrates* (Περὶ τῶν γνησίων τε καὶ νόθων Ἱπποκράτους συγγραμμάτων. *HNH*, M. 7.19–20 = K. 15.9.14–15). A fragment from the latter work, which discusses *Nat.Hom.*, is preserved in *HNH*, M. 7.15–8.18 = K. 15.9.8–11.11.

⁷ An overview of Galen's theoretical position on the elements and humours can be found in Hankinson 2008, 210–223.

⁸ Galen claims Sabinus, as well as the majority of exegetes (οἱ πλεῖστοι ἐξηγηταί), believed that *Nat.Hom.* was written by Polybus. *HNH*, M. 87–88 = K. 15.171–173. He also notes how Dioscorides attributed at least part of the work to Hippocrates, the son of Thessalos, i.e. the grandson of the legendary Hippocrates. *HNH*, M. 57–59 = K. 15.110–112. The anatomist, Lycus of Macedon (AD c. 120), also may have commented on *Nat.Hom.* However, Galen makes no mention in *HNH* of this rival's position on the authorship of *Nat.Hom.* Ihm 2002, 160–164, n. 164; *HNH*, M. 8–9, 87–88, 89 = K. 15.11–12, 171–173, 174–175; Flemming 2008, 342.

The description of the vessels in *Nat.Hom.* (L. 6.58.1–60.14) is cited by Aristotle (*HA*, 3.3.512b–513a7) and attributed to Polybus. *Anonymus Londinensis* (19.1–18) summary of *Nat.Hom.* Chapters 3–4 provide evidence that this part, as well, was ascribed to Polybus. Jouanna 1975, 55–59; 2000 279–283; Mansfeld 1994, 144–145.

⁹ Jouanna 2000, 282–283.

with the task of extricating parts of the text he deemed to be Hippocratic from those that he perceived were neither written by Hippocrates nor true to the τέχνη of Hippocrates.

In the prolegomena to *HNH* and *Hipp.Vict.*, Galen prepares his audience for his exegesis by discussing the title, authenticity, aim, and divisions of the standard presentation of *Nat.Hom.* in the received text.¹⁰ He claims that the received text for *Nat.Hom.* is an amalgamation of three texts: the first part (corresponding to L. 6.32.2–52.3) was the actual treatise (σύγγραμμα) written by Hippocrates entitled *On the Nature of Man* (Περὶ φύσεως ἀνθρώπου); the second part (corresponding to L. 6.52.4–68.16) contained a hodge-podge of anonymous and ‘invalid accretions’ (τὰ προσκείμενα κακῶς), which do not hold to the τέχνη of Hippocrates; and the third part (corresponding to L. 6.72.2–86.6) was a treatise written by Polybus entitled *On Healthy Regimen* (Περὶ διαίτης ὑγιεινῆς).¹¹ According to Galen, this regrettable amalgamation is caused by the unscrupulous practices of book traders, who, during the reign of the Ptolemaic and Attalid kings, added the latter two parts to Hippocrates’ treatise in order to increase the value of the text.¹² He goes on to claim that some of his contemporaries, having been fooled by the arrangement of the two treatises and the interpolated material, do not believe *Nat.Hom.* was written by Hippocrates, and subsequently, his detractors have argued that Hippocrates never put forward the four elements as contributing to the nature of man.¹³ Rising to these men’s challenges is the overarching commitment of Galen’s commentary.¹⁴

II. Genre

2.1 Exegesis

Before jumping into the analysis of these commentaries, it is necessary to contextualize them by briefly touching upon the conventions of medical exegesis and the character of Galen’s exegetical writings as it relates to *HNH* and *Hipp.Vict.*¹⁵

¹⁰ Mansfeld 1994, 10–57, 131–147; von Staden 2002a, 118–119, 128–131. As to the standard editions of *Nat.Hom.*, see n. 1.

¹¹ *HNH*, M. 7–9, 57–59 = K. 15.9–12, 108–110; *Hipp.Vict.*, M. 89 = K. 15.174–176. cf. *PHP*, 8.2.7.

¹² One cannot completely discount the veracity of Galen’s account. Nevertheless, this textual history, quite plausibly, is merely a convenient narrative derived from his culture’s negative perception of the buying and selling of books, as is evident in Lucian’s *Ind.* Hanson 1998, 33–34; Jouanna 2000, 281–282.

¹³ *HNH*, M. 7–11 = K. 15.9–16.

¹⁴ As von Staden points out, ancient commentaries were sometimes shaped by ‘something resembling a plot’, and some prefaces reveal the larger commitment of a commentary. von Staden 2002a, 118. cf. Baltussen 2007, 249.

¹⁵ What I have to say is here is addressed in greater detail in the following: Manetti and Roselli 1994; Mansfeld 1994, 117–176; von Staden 2002a; 2006; Flemming 2008.

In order for scientific texts to be meaningful, it must be interpreted; and in order for the interpretation to be persuasive, it must comply with the conventions of the intellectual community in which it occurs. Thus, the exegetical practices of 2nd century AD grammarians, which revolved around illustrating what was *πρέπον* and *οἰκείον* in poetry, differed from those of rhetoricians, who were focused on the *interpretatio scripti* as it applied to laws.¹⁶ While the exegetical methods of the Christian commentators Origen (AD 184–254) and Hippolytus of Rome (AD 170–c. 236) betray the techniques of Hellenistic grammarians, their Biblical exegesis, with its allegorical interpretations and attentiveness to the religious themes and the concerns of the Christian community, had its own rhetorical conventions.¹⁷ One must bear in mind that the exegetes of medical texts were generally practitioners, and therefore, to expound upon the writings of Hippocrates or some other medical figure was tantamount to studying medicine. Ancient medical commentaries exhibit a ‘quest for scientific truth and therapeutic utility’, which is sensitive to contemporary scientific issues and is often driven by rivalry with competing individuals and sects in medicine.¹⁸ Like other learned physicians, Galen was a product of the scholarly way in which Hippocratic medicine was taught. Thus, in addition to his study of other exegetes’ commentaries, he was influenced by the conventions of the exegetical discourse in which a teacher would read through a medical source text stopping to explain passages deemed important.¹⁹ This didactic scenario perhaps explains why, as we will see later, Galen adopts the authorial posture of a teacher in his Hippocratic commentaries.

For Galen, the act of explaining and clarifying, which is represented by the terms *ἐξηγεῖσθαι* and *σαφηνίζεισθαι* and their cognates, was not limited simply to the interpretation of texts. The terms could also be used to describe what one does to a subject. For example, Galen uses the term *ἐξήγησις* and its cognates to denote his activities in anatomical works.²⁰ In this context, to *ἐξηγεῖσθαι* an anatomical feature was to scientifically explain the unseen or poorly understood functions and features of the body. In regard to the *ἐξήγησις* of texts, the role of the exegete was to clarify what was unclear (*ἄσαφές*) in a passage. Galen identified two ways in which a passage might be considered unclear.²¹ First, the text may be unclear in and of itself (*ἄσαφές αὐτὸ δι’ ἑαυτό*). Secondly, the text may be unclear because the reader

¹⁶ Eden 1997, 7–40.

¹⁷ Young 1997.

¹⁸ von Staden 2002a, 121.

¹⁹ Galen sometimes indicates that he has taken into consideration both oral and written interpretations when commenting upon a text. For example, he claims that in *Hipp. Vict.* he will address what οἱ ἐξηγησάμενοι and his διδάσκαλοι failed to clarify in *Salubr.*, namely, what the author meant by ‘τοὺς ἰδιώτας’. *Hipp. Vict.*, M. 89.16–20 = K. 15.175.12–176.3. Sluiter 1999; von Staden 2002a, 132–133.

²⁰ Mansfeld 1994, 152–154.

²¹ *Hipp. Fract.*, K. 18b.319.6–16. Mansfeld 1994, 150–151; Flemming 2008, 336–337.

is ill-prepared or too dull (ἀμβλής) to grasp the meaning of a passage. In regard to the Hippocratic Corpus, Galen observed that these texts required a skilled exegete because the topics were often too difficult for the reader/student and because Hippocrates purposely left out some material since he was writing for those acquainted with his theories or because he was simply writing personal notes.²² In addition to these problems, Galen points out that the ancient terms, as well as Hippocrates' idiomatic style of medical discourse, were difficult for those not familiar with them; and therefore, these texts required a commentator who was familiar with the lexis of Hippocrates.²³

In various places within his oeuvre, Galen espouses principles of medical ἐξηγήσις. While these principles are often presented in the context of demonstrating his superiority to other medical exegetes, the following are nevertheless representative of both his ideals and much of his exegetical practice. The first general principle is that medical exegesis should reveal whether a passage is ἀληθές or not.²⁴

The second principle, which is closely related to the first, is 'utility'.²⁵ Rather than exclusively focusing on the meanings of words, a medical exegete should concern himself with issues related to the practice of medicine. The whole purpose of Galen's exegeses of Hippocratic works, as he describes them in *Lib.Prop.*, was to study the medical theory (αἱ ἰατρικαὶ θεωρίαι) taught by Hippocrates, i.e. the Hippocratic τέχνη.²⁶ He often censures other commentators for transgressing into what is not useful in their explanations. In the preface to his commentary on Book 1 of *Epidemics*, for example, he criticizes Quintus' commentary claiming he 'went past the useful part of the teaching' (τὸ χρήσιμον μέρος τῆς διδασκαλίας ὑπερέβαινεν).²⁷ The question of what is medically χρήσιμον and scientifically ἀληθές in a passage are behind many of his exegetical remarks in *HNH* and *Hipp.Vict.*, and both of these aforementioned principles explain why Galen often relates contemporary issues and theories in medicine to what is explicitly in the source text.

The third general principle is articulated in *Com.Hipp.* A good exegete, as Galen claims, should not just consider whether what is said is plausible (πιθανόν) and true (ἀληθές) but also whether it is consistent with the opinion of the author (γνώμη τοῦ συγγραφέως).²⁸ The search for the intention/thought of the author (γνώμη τοῦ συγγραφέως/*sententia auctoris*) was a well-recognized principle of exegesis among grammarians and rhetoricians, as

²² Mansfeld 1994, 151–152.

²³ Sluiter 1995.

²⁴ Mansfeld 1994, 161–169; Flemming 2008, 336–340.

²⁵ Flemming 2008, 336–338.

²⁶ *Lib.Prop.*, K. 19.33–35.

²⁷ *Hipp.Epid.*, K. 17a.6.10–11; Manetti and Roselli 1994, 1580–1593.

²⁸ *Com.Hipp.*, K. 7.646.4–9; Mansfeld 1994, 148–149.

well as philosophers and physicians.²⁹ By the time Galen was writing, various methods of demonstrating the author's intention were in use, such as the principle of interpreting an author from himself (i.e. *Homerum ex Homero*), a method Galen often employed in his Hippocratic commentaries to justify his interpretations.³⁰ Ultimately, these methods were to help the exegete to arrive from what is written to what is not written. Thus, for Galen, as well as for other exegetes, the goal was not to preserve the literal meaning of the passage but the γνώμη of the author. Galen's reliance on this principle becomes especially evident in *HNH* and *Hipp.Vict.*, when the text appears to deviate from what Galen held to be consistent with scientific medicine and the τέχνη of Hippocrates.

2.2 Exegetical writings

During 2nd century AD, the scholarly interpretation of medical and philosophical texts manifested itself in a variety of forms of exegetical writings commonly identified by modern scholars as lexica, scholia and commentaries. The basic formula of these exegetical works consisted of 'two parts: the lemma (word or words to be explained) and the definition or comment'.³¹ Modern scholars generally term any ancient exegetical prose whose pairing of *lemmata* and exegetical remarks follows its source text's order of presentation as a running commentary. However, at the time when Galen was writing, there was no universal genre term to denote that one was writing such a commentary.³² When referring to the titles of his Hippocratic exegetical works in *Lib.Prop.* and *Ord.Lib.Prop.*, he uses the following formulae: Περὶ τῶν Ἱπποκρατείων ὑπομνημάτων,³³ τὰ τῶν Ἱπποκρατείων συγγραμμάτων ἐξηγητικά³⁴ and ἐξηγητικά ὑπομνήματα.³⁵ The titular formula (ὑπομνήματα εἰς + title) offers a fairly reliable indicator that Galen had written what we understand to be a commentary given that the extant examples of this secondary literature has the formal features of a running commentary.³⁶ However, one should not take the term ὑπομνήματα to denote a commentary. As is the case with many Greek words that ancient authors used to describe the kind of prose they were writing, ὑπομνήματα was a polysemous term which did not denote

²⁹ *Plac.Prop.*, Nutton 1999, 54.5–18; Mansfeld 1994, 10–57; Eden 1997, 7–19.

³⁰ In *De inventione* (*Inv.*, 2.117), Cicero provides a list of ways one can find the *sententia scriptoris*: 'from his other writings and from his deeds, words, his disposition and life' (*ex ceteris eius scriptis et ex factis, dictis, animo atque vita eius*). As to the *Homerum ex Homero* rule in Galen's exegesis, see *Dig.Puls.*, K. 8.958; Mansfeld 1994, 148, 176–179; von Staden 2002a, 115–117.

³¹ Dickey 2007, 107.

³² Ihm 2002, 2–10; von Staden 2006, 30–40; Flemming 2008, 324–332.

³³ *Lib.Prop.*, Boudon-Millot 2007a, 159.9–162.11 = K. 19.108–114.

³⁴ *Lib.Prop.*, 159.9–12 = K. 19.33.14–17.

³⁵ *Ord.Lib.Prop.*, Boudon-Millot 2007a, 97.9–12. cf. *Diff.Resp.*, K. 7.764.11.

³⁶ Flemming 2008, 326.

the formal characteristics of a genre.³⁷ The relationship between the term ὑπομνήματα and the concept of memory (ὑπόμνησις) suggests that these texts were somehow related to what we would term as ‘memoranda’ or ‘notes’, that is to say, things written down to jog the memory of the author or his audience. Therefore, in the context of secondary scholarship, the titular formula (ὑπομνήματα εἰς + title) indicates they were notes made ‘into’ the received text as Galen was studying it.

With that being said, in *Lib.Prop.* and elsewhere, Galen notes how his ‘ὑπομνήματα εἰς’ exegetical literature on Hippocratic texts follows the conventions of the ‘word-for-word exegeses’ (ἐξηγήσεις καθ’ ἐκάστην αὐτοῦ λέξιν) that his predecessors had made.³⁸ He distinguishes his καθ’ ἐκάστην αὐτοῦ λέξιν exegesis from his other ἐξηγητικά on the Hippocratic writings, specifically, his ‘*secundum Hippocratem*’ works *Hipp.Elem.*, *Diff.Resp.* and *Hipp.Com.*, which, for lack of a better term, I will call ‘exegetical treatises’. Unlike his running commentaries, these exegetical treatises lemmatized and expounded upon only key passages from a ‘Hippocratic’ text (or texts) in order to systematically reveal Hippocrates’ opinion on a given medical theme.³⁹ That Galen conceives them as two distinct kinds of exegesis is made evident in the different titular formulas he uses for exegetical treatises and commentaries—respectively, περὶ X (κατὰ τὴν Ἱπποκράτους γνώμην) versus ὑπομνήματα εἰς + Hippocratic title—and by the simple fact that in his list of exegetical texts in *Lib.Prop.* and *Ord.Lib.Prop.*, he separates the two groups from each other.⁴⁰

Making a distinction between these two types of exegesis becomes especially important to Galen when he tries to illustrate the relationship between *Hipp.Elem.* and *HNH*. Galen notes in *PHP*:

[O]ur work *On the Elements according to Hippocrates* is an ἐξήγησις of the work *On the Nature of Man*. Its exegesis is not in the same word-for-word (καθ’ ἐκάστην λέξιν) manner that commentators are in the habit of making, but it is an explanation of only the chief points in

³⁷ As von Staden points out, Galen uses ὑπομνήματα for texts that have quite different formal features and aims, such as treatises and commentaries; and furthermore, this term is used to denote books or special parts of a treatise. von Staden 1998, 72–73. Galen sometimes uses ὑπομνήματα to suggest that a text was initially written at a lower level of refinement. Unlike συγγράμματα, which are the kind of refined works ready for public consumption, Galen often suggests that ὑπομνήματα were written for the individual rather than for the general public. von Staden 2006, 23–24. cf. Jenner 1989, 65–66.

³⁸ ἐξηγήσεις δὲ καθ’ ἐκάστην αὐτοῦ λέξιν ἤδη πολλοῖς τῶν πρὸ ἐμοῦ γεγραμμένας.... *Lib.Prop.*, Boudon-Millot 2007a, 160.1–2 = K. 19.34.9; *PHP*, De Lacy 1980, 492.25–29; *HNH*, M. 3.14–19 = K. 15.2.7–14; Jouanna 2000, 276–79.

³⁹ Mansfeld 1994, 135. A possible early example of this kind of exegetical prose would be Apollonius of Citium’s (c. 90–15? BC) *Περὶ τῶν ἄρθρων πραγματεία* seeing how it expounds upon selective passages of Hippocrates’ *Art.* in order to ‘teach surgery “according to Hippocrates”’. Potter 1993, 117.

⁴⁰ *Ord.Lib.Prop.*, Boudon-Millot 2007a, 97.9–98.3; *Lib.Prop.*, Boudon-Millot 2007a, 159.10–160.4 = K. 19.33.12–34.14.

respect to his doctrine (τὰ συνέχοντα τὸ δόγμα) together with the appropriate proofs (ταῖς οἰκείαις ἀποδείξεσιν).⁴¹

Here Galen points out that *Hipp.Elem.*'s exegesis is different from word-for-word exegeses because he has selected passages specifically to illustrate Hippocrates' dogma rather than commenting on the whole text. The other distinction is that he uses scientific proofs (ἀποδείξεις) to support the veracity of this dogma. *Hipp.Elem.*'s exegesis, thus, was for demonstrating in greater detail—rather than in a running commentary—how a passage was scientifically true. Although a large portion of his exegetical writings on Hippocratic treatises was, in fact, running commentary, Galen sometimes suggests that by writing such word-for-word exegeses, he is in some ways repeating himself because in his treatises he had already addressed many of the medically significant opinions of Hippocrates.⁴² Therefore, in Galen's oeuvre, the running commentary was for a lower level of explanation, one that simply familiarizes the audience with the source text.

In the proem to *HNH*, similar points are brought up. Here, Galen justifies why he was now writing a running commentary on *Nat.Hom.* given that he had already given his interpretation of it in *Hipp.Elem.* He explains that *Hipp.Elem.* was written to meet the needs of a ἑταῖρος who was already familiar with *Nat.Hom.*⁴³ Because this ἑταῖρος had a detailed knowledge (ἀκριβῶς ἐπιστάμενος) of the text, Galen's exegesis in *Hipp.Elem.* was directed toward 'clearly revealing' (σαφῶς δεῖξαι) 'all the chief points' (τὰ συνέχοντα πάντα) of *Nat.Hom.*⁴⁴ He claims that he wrote *HNH* 'since my friends (ἑταῖροι) wanted to receive from me an ἐξήγησις of the same treatise of Hippocrates not only of the necessary passages in respect to his dogma, as I have done in that previous book [*Hipp.Elem.*], but of all of the passages in order.'⁴⁵ Nonetheless, Galen declares at the end of this proem that his commentary will prove that Hippocrates indeed wrote *Nat.Hom.*, a position that apparently

⁴¹ ... ἐξήγησίς ἐστι τὸ ἡμέτερον γράμμα τὸ περὶ τῶν καθ' Ἱπποκράτην στοιχείων τοῦ γεγραμμένου περὶ φύσιος ἀνθρώπου. τὴν δὲ ἐξήγησιν οὐχ οὕτως ἔχει γεγνηῖαν ὥς εἰώθασιν οἱ τὰς ἐξηγήσεις γράφοντες ποιεῖσθαι καθ' ἑκάστην λέξιν, ἀλλὰ τῶν συνεχόντων τὸ δόγμα μόνων ἅμα ταῖς οἰκείαις ἀποδείξεσιν ὥς εἴπερ ἐθέλεις μανθάνειν, ἐπ' ἐκεῖνο μετὰβηθι τὸ βιβλίον. *PHP*, De Lacy 1980, 492.25–29. The difference between the two works' exegeses is certainly borne out by analysis. While *HNH*'s *lemmata* and exegesis follow the order and contents of *Nat.Hom.*, in *Hipp. Elem.*, Galen selectively cites key passages from *Nat.Hom.* without attention to the order of the source text and clearly for the purpose of systematically illustrating Hippocrates' views on the elements (Chap. 1–5), qualities (Chap. 6–9), and humours (Chap. 10–14). De Lacy 1996, 45, 50.

⁴² *Ord.Lib.Prop.*, Boudon-Millot 2007a, 97–98; *Hipp.Epid.* K. 17a.577; *HNH*, M. 3.4–19 = K. 15.1–2.

⁴³ *HNH*, M. 3.4–6 = K. 15.1.4–7.

⁴⁴ *HNH*, M. 3.9–14 = K. 15.2.2–7.

⁴⁵ νῦν οὖν, ἐπειδὴ καὶ αὐτοῦ τοῦ Ἱπποκράτειου συγγάμματος ἐξήγησιν οὐ μόνον τῶν ἀναγκαίων εἰς τὸ δόγμα λέξεων, ὥς ἐν ἐκείνῳ πρότερον ἐπεποιήμην, ἀλλὰ πασῶν ἐφεξῆς ἐδεήθησαν οἱ ἑταῖροι παρ' ἐμοῦ λαβεῖν, ἀρχόμενος τῆς ἐξηγήσεως ἐκεῖνα λέξω πρότερον, ὅσα παρέλιπον εἰπεῖν ἐν ἀρχῇ τοῦ Περὶ τῶν καθ' Ἱπποκράτην στοιχείων, ἐπειδὴ γινώσκουν αὐτὰ τὸν ἑταῖρον ἠπιστάμην. *HNH*, M. 3.14–19 = K. 15.2.7–14.

had come under attack after he wrote *Hipp.Elem.*⁴⁶ Therefore, Galen has chosen a type of exegesis that was more suitable to demonstrating the authenticity and character of the received text.

According to *Lib.Prop.*, *HNH* was written during the second phase of Galen's Hippocratic commentaries.⁴⁷ As was noted in the previous chapter, this was a period in which he broadened his exegetical horizon to take into fuller consideration the opinions of other commentators and to produce commentaries written 'with an eye for general publication' (πρὸς κοινὴν ἔκδοσιν ἀποβλέπων).⁴⁸ While this is clearly a schematization of his commentaries, this image of *HNH* is supported by analysis. In *HNH*, Galen's interest in authenticating *Nat.Hom.* by addressing what other exegetes have said about the authenticity of the text reveals that he is indeed taking into consideration the importance of using his commentary to respond to issues that do not strictly pertain to what is medically useful. As to *HNH* being composed for 'general publication', in *HNH*, Galen intimates an awareness of the needs of a broad audience. For example, he makes concessions for the audience in the preface, noting how his discussion of the terms φύσις and στοιχεῖα is for those of 'you' (ὕμεις) who are not aware of the philosophical works written about φύσις.⁴⁹ His awareness of a general audience is also evident in *Hipp.Vict.* when he remarks, 'What I often say in conversations with close companions (ἐταίρους) and other friends (φίλους), I will say now'.⁵⁰

III. Audience

3.1 Ideal audience

As was noted, Galen makes quite clear that he is writing these commentaries in response to his friends' (ἐταῖροι) requests. In the preface to Book 1 of *HNH*, he addresses his friends with the vocative, ὦ ἐταῖροι, and then points out how they are better than the physicians, presumably Erasistrateans, who have failed to understand the differences between

⁴⁶ *HNH*, M. 10–11 = K. 15.15–16.

⁴⁷ Of the Hippocratic commentaries listed in *Lib.Prop.*, *HNH* was composed just before (AD c. 190) his last Hippocratic commentary, which expounded on *AWP*. Ilberg 1889, 236; Jouanna 2000, 279. As to the date of composition of *Hipp.Vict.*, it seems to have been written after AD 193, seeing how Galen does not mention it in *Lib.Prop.* See n. 4.

⁴⁸ *Lib.Prop.*, Boudon-Millot 2007a, 160.18–21 = K. 19.35.8–12.

⁴⁹ *HNH*, M. 3.20–4.5 = K. 15.2.17–3.8.

⁵⁰ ὅπερ δὲ λέγω πολλάκις ἐν ταῖς πρὸς τοὺς ἐταίρους τε καὶ τοὺς ἄλλους φίλους συνουσίαις, ἐρῶ καὶ νῦν. *Hipp.Vict.*, M. 104.6–7 = K. 15.205.1–2.

organs and homoiomerous parts.⁵¹ The reason he gives for his friends' superior knowledge is that they have read his works *Morb.Diff.* and *MM*. At the end of this preface, he seems to invoke this same audience of ἑταῖροι when he exhorts them to remind his critics to pay attention to the fact that, in all the Hippocratic treatises, Hippocrates posited the foundation (θεμέλιον) of his art 'by his knowledge of the discovered elements' (ἐν τῇ περὶ τῶν εὑρημένων στοιχείων ἐπιστήμη).⁵² This anxiety to influence the perception of the text seems to indicate that his target audience may not be limited to his ἑταῖροι, for when he appears to be still speaking to his ideal audience just before he begins his exegesis of *Nat.Hom.*, he declares, '[F]rom the benefit of the following, it will be clear to those who are not completely dull that he [i.e. Hippocrates] who always affirms the same elements is also the one who wrote this book that is now before us.'⁵³ This 'poisoning-of-the-well' strategy suggests that he may be invoking his ideal audience to indirectly speak to those outside his circle of friends and students.

After the preface, Galen does not address the audience as ἑταῖροι, choosing instead to simply use the second person singular and plural without a vocative. Whether his ἑταῖροι were the target audience or a literary conceit is not entirely clear. What is clear is that throughout his commentary, his approach to this audience is that of a teacher writing to his students. He uses the second person to remind the audience of what they had previously learned and to instruct them.⁵⁴ Thus, much of his exegetical practice reflects the didactic situation of a teacher clarifying *Nat.Hom.* for those who were not entirely familiar with its contents but who were in total agreement with the teacher's theoretical views. While simply not enough textual evidence exists to argue that this posture was a rhetorical convention of medical commentaries, given that medicine was orally taught in the aforementioned manner, such a posture would seem to fit the decorum of this exegetical discourse.

3.2. Presence of the audience

Often, when Galen employs the second person singular in his exegesis, he emphasizes the future or potential discoveries an individual will make 'if' he follows Galen's logic. These occurrences (verbal and pronominal) of the second person singular are associated with conditional statements expressing future result 'if' one will adhere to the protasis: for example, 'And if you add to this account what was proved in this passage which we are

⁵¹ *HNH*, M. 7 = K. 15.8-9.

⁵² *HNH*, M. 10.20-11.3 = K. 15.15.14-16.9.

⁵³ ἐκ περιουσίας δε κατὰ τὴν ἀκολουθίαν τοῖς οὐκ ἀσυνετοῖς φανέεται τὰ αὐτὰ τιθέμενος αἰεὶ στοιχεῖα τὸ τε βιβλίον τὸ νῦν ἡμῖν προκειμένον αὐτὸς γράψας. *HNH*, M. 11.5-7 = K. 15.16.12-15.

⁵⁴ *HNH*, M. 36.11-12 = K. 15.67.5-7, M. 38.28-39.2 = K. 15.72.8-13, *Hipp.Vict.*, M. 101.8-14 = K. 15.199.5-11, cf. Jouanna 2000, 278-279.

presently addressing, then you will completely construct the dogma of Hippocrates.’⁵⁵ His use of the second person singular is clearly tied to an idiomatic way of conveying the logical consequence of a statement. Thus, his audience would recognize a hypothetical ‘you’ rather than Galen suddenly addressing an individual in the audience. His use of the singular ‘you’ does not occur only in conditional statements; it is a part of his medical instructions as well. For example, he claims, in regard to the use of clysters, ‘Moreover, for you who would intend to cleanse the whole body, one must purge upward from the stomach during summer and downward from the stomach during winter, just as it has been stated in *Aphorisms*.’⁵⁶ He then goes on to say that it is best for one to be specific in the use of purges: one should purge from the parts that have superfluous matters ‘all that you want to hinder from increasing’ (ὅσα δὲ κωλύσαι θέλεις ἀυξηθῆναι). Here again, the audience would understand this to be an unspecified ‘you’. In both cases, medical instruction and logical conditions, his use of the second person singular serves a similar rhetorical purpose. Galen is using a more personal expression to draw his audience’s attention to where they need to follow closely his instruction. And, in these instances, he confirms his role as a teacher.

Although Galen’s use of the second person plural occurs less frequently in his exegesis than in his prefatory remarks, it nevertheless serves an important rhetorical function.⁵⁷ In his commentary, Galen uses second person plural verbs in the past tense to remind the audience of what they have been taught or have seen. For example, he states, ‘For you have seen in these same works of the art many arguments refuting those who do not concede that the thing which was evacuated was drawn by the emetic medications.’⁵⁸ Here, Galen is pointing out to his audience that they have seen in Galen’s *Purg.Med.Fac.* the same type of argument which ‘Hippocrates’ has used in the lemma to refute monists (corresponding to L. 6.42.8–44.4). Thus, if we consider that Galen is writing to a broad audience, he reassures the audience of the scientific veracity of the passage by invoking his ideal audience of learned disciples as witnesses. Another example of this didactic posturing is evident when he reminds the audience that ‘you have learned many times’ (πολλάκις ἐμάθετε), presumably from Galen, the difference between elements and humours.⁵⁹ Likewise, by noting how the audience would be aware of why he is bringing up a matter somewhat tangential to the text, Galen also

⁵⁵ ἔάν οὖν τούτῳ τῷ λόγῳ προσθῆς τὸ κατὰ τὴν νῦν ἡμῖν προκειμένην ῥῆσιν ἀποδεικνύμενον, ὁλόκληρον ἐργάσῃ τὸ δόγμα τοῦ Ἱπποκράτους. *HNH*, M. 38.14–16 = K. 15.71.10–12.

⁵⁶ καθαίρειν μέντοι τὸ σύμπαν σῶμα βουλευθέντι σοι θέρους μὲν διὰ τῆς ἄνω, χειμῶνος δὲ διὰ τῆς κάτω κοιλίας φαρμακευτέον, ὡς ἐν Ἀφορισμοῖς εἴρηται. *Hipp.Vict.*, M. 101.8–10 = K. 15.199.5–7.

⁵⁷ The percentage of occurrence of the second person in the prefatory remarks is 0.65%, but in the body of the text it occurs 0.11%. Appendix C, Tables 1 and 2.

⁵⁸ ἐθεάσασθε γὰρ ἐπ’ αὐτῶν τῶν ἔργων τῆς τέχνης οὐκ ὀλιγάκις ἐλεγχόμενους τοὺς μὴ συγχωροῦντας ἔλκεσθαι τὸ κενούμενον ὑπὸ τῶν καθαιρόντων φαρμάκων. *HNH*, M. 38.28–39.2 = K. 15.72.8–10.

⁵⁹ *HNH*, M. 36.11–12 = K. 15.67.5–7.

intimates that his ideal audience is so familiar with his teachings that they understand the importance of such remarks.⁶⁰ Whether he actually had a group of disciples who were as knowledgeable of his teachings as he portrays is unclear. Nevertheless, these kinds of remarks undoubtedly conveyed that Galen, like other important medical exegetes, such as Quintus and Sabinus, had a group of loyal disciples who could testify to his knowledge of Hippocratic medicine.

What is the role of his ideal audience in this exegetical text? As we have already observed, Galen uses the preface to set before this audience the textual question of authorship and the theoretical question of the elements. From this point on, Galen is in total control of the exegesis of this work. The audience does not play an active role in these decisions; that is to say, Galen does not intimate that he is responding to their questions or concerns. However, he does reveal what the audience is to do with the knowledge they gain from his explanations. For the most part, they are to pursue, with the help of Galen's other works, theoretical questions he raises in his explanations. In *Hipp.Vict.*, he tells the audience to first read his treatise *On Mixtures* and then his work *On Health* in order to observe the theoretical basis behind his regimen for the elderly, which he only touches upon in his exegesis of the passage.⁶¹ With remarks like this, Galen reveals that a detailed account of such topics is not the aim of his commentary. In this way, he indicates that the audience must suspend such questions, and for the time being, they are merely to observe the scientific veracity of the arguments in *Nat.Hom.* as far as Galen's exegesis will allow.

IV. Author

4.1 Presence of the author

When compared to that of his contemporaries, such as Alexander of Aphrodisias, Galen's approach to the audience was much more person-oriented. Galen frequently communicates his presence throughout these commentaries by using the first person plural and singular (pronominal and verbal).⁶² For example, he uses the first person plural and singular a total of 106 times in Book 1 of *HNH*.⁶³ The first person is used more frequently (1.49%) in the preface to Book 1 than in his commentary to this part of the text (0.58%).⁶⁴ In

⁶⁰ διὰ τί δὲ προσέθηκα τῷ λόγῳ τὸ ἴσως, οἶμαι γινώσκειν ὑμᾶς· ἐν γὰρ τοῖς Περὶ σπέρματος ὑπομνήμασιν ἐδείχθη.... *HNH*, M. 39.29–40.1 = K. 15.74.7–8.

⁶¹ *Hipp.Vict.*, M. 95.18–96.13 = K. 15.187.17–189.8.

⁶² Appendix C, Tables 1 and 2.

⁶³ There are 46 occurrences in the prefatory remarks and 60 in the body of the text. Appendix C, Table 3.

⁶⁴ Appendix C, Tables 1 and 2.

the preface, he tends to use the first person singular;⁶⁵ however, in the body, he generally uses the first person plural.⁶⁶ This difference in usage of first person singular and plural seems to be a matter of decorum. The preface was the appropriate place for Galen's more person-centred rhetoric, and the body of the commentary was where he settled into the role of teacher, using 'we' to convey a sense of general agreement between himself and his ideal audience. This notion of Galen addressing his audience as a teacher addressing his disciples may explain why in the body of *HNH* Galen relies on the first person plural to a greater extent than he does in his other works.⁶⁷

4.2 Exegetical authority

In order for his explanations to be persuasive, Galen needed to establish his authority over the text. One of the ways in which he demonstrates this is by his criticisms of contemporary and previous Hippocratic scholars. Most of his criticisms are directed toward the collective, ἐξηγηταί, who seem to represent both the oral and written traditions of commenting upon this text.⁶⁸ Often this collective is evoked to demonstrate how his approach was superior to theirs. Thus, he censures them for having badly omitted something (κακῶς παραλελειφθαι) that should have been explained, or at other times, he accuses them of being too wordy (πολυλογία) and failing to see the important medical truth in a passage.⁶⁹ He singles out two noteworthy individuals for specific errors. Galen finds fault with the famous Hippocratic editor Artemidorus Capito (AD c. 120) for making an erroneous emendation (κακῶς μεταγράψαι) to the ancient reading (παλαιὰ ῥῆσις), which causes the text to list only three—rather than four—elements.⁷⁰

The individual who draws most of Galen's criticisms is the Hippocratic commentator Sabinus (c. end of 1st century AD).⁷¹ Although in other works Galen recommends Sabinus as a knowledgeable commentator,⁷² he is quite critical of him in *HNH*, primarily because Sabinus claimed that Polybus was the author of *Nat.Hom.* To undermine the credibility of

⁶⁵ Of the total number of occurrences of the first person in the preface 57% occur in the first person singular and 43% occur in the first person plural. Appendix C, Table 3.

⁶⁶ Of the total number of occurrences of the first person in the body of the text 18% occur in the first person singular and 82% occur in the first person plural. Appendix C, Table 3.

⁶⁷ Of the total number of occurrences of the first person in the body of the text in *HNH* 82% are in the first person plural. The aforementioned criterion in his other works is as follows: *Foet.Form.* (40% * first person plural), *Lib.Prop.* (4%), *Protr.* (45%), *Thras.* (61%) and *Puls.* (67%). Appendix C, Table 3.

⁶⁸ *HNH*, M. 14.20, 14.24, 66.29, 77.7, 85.18, 85.22, 87.18 = K. 23.7, 15.23.11, 129.2, 150.4, 167.15, 168.4, 171.12; *Hipp.Vict.*, M. 89.20, 97.16, 105.2, 109.1, 109.14 = K. 176.2, 192.3, 206.11, 212.7, 214.11, 215.6

⁶⁹ *Hipp.Vict.*, M. 89.16–20, 107.27–108.3, 108.19–109.28.

⁷⁰ *HNH*, M. 13.19–16.11; Manetti and Roselli 1994, 1617–1633. See n. 4.

⁷¹ (Sabinus) *HNH*, M. 15.13, 15.18, 82.19, 85.19, 87.18 = K. 15.25.2, 25.6, 161.11, 168.1, 171.12; *Ord.Lib.Prop.*, Manetti and Roselli 1994, 1607–1614.

⁷² *Ord.Lib.Prop.*, Boudon-Millot 2007a, 98 = K. 19.57–58.

Sabinus' position, Galen calls into question Sabinus' discernment as a commentator. Likening Sabinus to a physician who chooses to treat a patient's hangnail rather than his dropsy, Galen lampoons Sabinus for claiming that both parts of *Nat.Hom.* were written by Polybus simply on the basis of a few passages at the end of the second part of the text.⁷³ Galen also asserts that Sabinus failed to recognize that the very passage which Sabinus ascribed to Polybus reveals itself, by the author's lexis, to have been written by a much later author. Nothing is too surprising about Galen's agonistic posture toward fellow exegetes as it is in line with the decorum of this genre.⁷⁴ In the competition for status and followers, such remarks were important ways in which both philosophical and medical exegetes reassured their audiences that they were listening to the appropriate master-teacher.

Galen does not always explicitly criticize other exegetes. Sometimes he evokes them merely to indicate that he is addressing a common exegetical problem. In regard to a passage in *Nat.Hom.* (corresponding to L. 6.15–19) discussing the placement of τομαί in relation to painful parts of the body, Galen confirms that the exegetes have correctly (ὀρθῶς) understood that, in this passage, the author is speaking about bloodletting (φλεβοτομίας).⁷⁵ However, he points out that the commentators all agree (ὁμολογοῦσι πάντες) that the passage is unclear as to when, in pain or in health, one should begin to oppose superfluous humours (οἱ πλεονάζοντες χυμοί). To provide a plausible explanation to their quandary, he posits, 'I think that he has spoken in regard to healthy people since the writer wants to move the superfluous humours into other parts.'⁷⁶ In these places, which are far less frequent than his critical remarks, Galen involves himself in the problems of other exegetes. Be that as it may, he paints himself as being somewhat different from other commentators on the Hippocratic Corpus since he never speaks in terms of 'we' when he mentions them. The 'we' in Galen's commentary is reserved for physicians, philosophers and, most importantly, his ideal audience of disciples. More often than not, the ἐξηγηταί make up the 'them' in Galen's *nos contra eos* rhetoric.

Although it was well recognized that the commentators on Hippocratic works were often physicians,⁷⁷ Galen's rhetorical strategy is to deemphasize the exegetes' understanding of Hippocratic theory by portraying their exegeses as being more concerned with quibbling over the meaning of words than with addressing issues of medical science.⁷⁸ For example,

⁷³ *HNH*, M. 85.18–86.4 = K. 167.16–173.4.

⁷⁴ von Staden 2002a; 2006; Baltussen 2007.

⁷⁵ *HNH*, M. 77.1–13 = K. 15.149.14–150.11.

⁷⁶ ἔμοι μὲν οὖν μᾶλλον δοκεῖ ἐπὶ τῶν ὑγιαίνοντων εἰρῆσθαι βουλευμένου τοῦ γράψαντος ταῦτα προσεθίζειν εἰς ἄλλα μόρια φέρεσθαι τοὺς πλεονάζοντας χυμούς. *HNH*, M. 77.11–13 = K. 15.77.9–11.

⁷⁷ von Staden 2002a, 124–136; 2006.

⁷⁸ Sluiter 2000, 190.

when he identifies a passage (ρήσις) (corresponding to L. 6.46.9–20) as being σαφής and οὐ δεομένη ἐξηγητοῦ σαφηνίζοντος αὐτήν, he goes on to say that certain men, nevertheless, still endeavour to comment upon part of the statement.⁷⁹ He points out that these men have failed to provide a good explanation of the phrase, γίνεται...τὰ ἄλλα νοσήματα φλεγματώδεα, because they have left the article out (χωρὶς τοῦ ἄρθρου) of their reading. Thus, their reading suggests ‘other phlegmatic diseases arise’ rather than ‘the other diseases become phlegmatic’. Galen claims the latter reading is both grammatically correct and a sound medical observation, in that diseases become more phlegmatic in the winter just as the author is suggesting. While correcting the interpretations of other exegetes is a fundamental part of writing a commentary, Galen’s reasons for their errors serve to distinguish himself from them. His remark that the passage ‘does not need an exegete’ suggests that he is fixing the mistakes of commentators whose lack of understanding of medicine has led them to incorrectly see an ambiguity in the text. In this way, he presents himself as having a better understanding of the real issues in the text due to his medical knowledge.

To demonstrate an expertise specific to the *Nat.Hom.*’s subject matter, Galen emphasizes his knowledge of philosophical inquiries into φύσις. In his preface, he uses the first person plural to describe how ‘we and many others of the philosophers have demonstrated elsewhere’ (ἐτέρωθι δεδείχαμεν ἡμεῖς τε καὶ ἄλλοι πολλοὶ τῶν φιλοσόφων) the nature of elements (στοιχεῖα) using grammar as the model.⁸⁰ Later, he notes how ‘Aristotle and we term’ the uniform constructed parts of the body ‘perceivable elements’ and ‘homoiomeric elements’,⁸¹ all of which underscores the fact that his exegesis is informed by his own inquiries into φύσις and by his knowledge of philosophical literature on this subject. Galen also suggests that his inquiries into the elements of the human body are in line with what Plato expressed as Hippocrates’ method in the *Phaedrus* (270c3).⁸² He notes, ‘Whether the human body is one thing altogether or a composition of all four is especially useful in the investigation, just as Plato’s statement taught, and in respect to *The Therapeutic Method*, we had taught straightforwardly in the first parts of it.’⁸³ Ultimately, however, Galen’s professional identity and his continued assertions of understanding the art of Hippocrates carry much of his exegesis. Such remarks portray Galen as a practitioner–exegete

⁷⁹ *HNH*, M. 43.13–23 = K. 15.83.1–84.7.

⁸⁰ *HNH*, M. 5.10–6.3 = K. 15.5.10–7.1.

⁸¹ ...ἅπερ Ἀριστοτέλης καὶ ἡμεῖς ὀνομάζομεν ‘στοιχεῖα πρὸς αἴσθησιν’ καὶ ‘ὁμοιομερῆ’. *HNH*, M. 6.14–15 = K. 15.7.13–14.

⁸² *HNH*, M. 18.18–21 = K. 15.30.16–31.12.

⁸³ τὸ γὰρ τοι χρήσιμόν ἐστιν ἐν τῷ ζητῆσαι, πότερον ἐν ἀπλοῦν ἐστὶ τὸ σῶμα τῶν ἀνθρώπων ἢ σύνθετον ἐξ ἀπλῶν τεττάρων, ὡς ἢ τε τοῦ Πλάτωνος ἐδίδαξε ρῆσις ἡμεῖς τε κατὰ τὴν Θεραπευτικὴν μέθοδον ἐδιδάξαμεν εὐθύς ἐν τοῖς πρώτοις αὐτῆς. *Ibid.*

who was at one with the author on whom he is commenting, and this authorial image reassures his audience that he is able to discern the γνώμη of Hippocrates.

Galen's commitment to demonstrating the therapeutic utility of passages did not extend so far as to render his commentary completely devoid of the type of erudition his society valued.⁸⁴ Throughout his commentary, he reveals himself to be a scholar fully aware of philological methods and scholarly issues. To give credence to his interpretations of Hippocrates' specific usage of words, as was noted, he turns to the well-recognized exegetical principle of interpreting the author from the author himself.⁸⁵ And, in a manner reflective of his society's interest in the language of οἱ παλαιοί, he indicates that his exegesis takes into account the ancients' λέξις and the idiomatic way in which they expressed themselves, which he terms τὸ ἔθος τῶν Ἑλλήνων.⁸⁶ He flags his awareness of the issues of transmission, pointing out how ambiguities could have crept into the text due to scribal error.⁸⁷ He also uses a technical term of textual criticism by noting how Dioscorides used the ὀβελός to mark a corruption in *Nat.Hom.* In his explanation of this sign, he points out that Aristarchus also used it in his recensions of Homer. Such a remark also reveals his awareness of philological scholarship on poetry and other literary works.⁸⁸ Likewise, he avails himself of the specialized language of rhetoricians and dialecticians when he justifies a change he made to the text (*HNH*, M. 11.8–14 corresponding to L. 6.32.2–7).⁸⁹ To show this change was reasonable, he declares that the first passage contains a 'type of ambiguity' (γένος τῆς ἀμφιβολίας) in respect to 'distribution and combination' (διαίρεσις καὶ σύνθεσις).⁹⁰ He points out that instead of ἐνέον ('which is inside'), the text should read ἐν ἐόν ('which is one').⁹¹ Because it is unclear how this phrase was to be pronounced and because the original manuscript did not contain diacritical marks, his position is that one has grounds to suspect that later exegetes have erred by not recognizing that there should be a rough breathing on the epsilon and the two words should be divided (διαίρεσις) rather than combined (σύνθεσις). In

⁸⁴ Flemming 2008, 337–338.

⁸⁵ *HNH*, M. 12 = K. 15.18–19.

⁸⁶ *HNH*, M. 12.26–13.16, 31.18–27, 40.10–24, 41.9–19, 87.15–88.11 = K. 15.20.1–21.5, 57.4–17, 74.18–75.17, 77.5–78.2, 171.9–173.1; *Hipp.Vict.*, M. 102.10–22 = K. 15.201.5–202.3.

⁸⁷ *HNH*, M. 25.22–26.8 = K. 15.46.1–47.6; *Hipp.Vict.*, M. 98.25–99.15 = K. 15.194.11–195.14.

⁸⁸ *HNH*, M. 58.7–9 = K. 15.110.12–111.5. As to the use of this sign in antiquity, see Dickey 2007, 134.

⁸⁹ *HNH*, M. 12.26–28 = K. 15.20.1–3.

⁹⁰ The same terminology occurs in Galen's discussion of Aristotle's *Sophistici Elenchi*. In this work, Galen explains that in some cases, a written sentence can be ambiguous παρὰ δὲ τὴν σύνθεσιν καὶ διαίρεσιν, which is to say, two grammatically correct readings render different meanings if the words in the clause/phrase are read together or separately. *De Captionibus*, Edlow 1977, 89.11–90.2, 110.18–112.4. cf. *Hipp.Elem.*, K. 1.438.14. This same terminology appears in Aelius Theon's (c. 1st AD?) *Progymnasmata* 129.1 and 130.14. Roselli 2004, 58, n. 26. As Roselli has shown, the awareness of these types of ambiguities was shared by dialecticians and rhetoricians. Roselli 2004, 57–61.

⁹¹ *HNH*, M. 12.26–13.8 = K. 15.20.1–15.

this way, he illustrates that he is not an unsophisticated technician but a scholar whose erudition affords him the right to rectify errors in the text as he sees fit; thus, this image also empowers him to persuasively question other exegetes' understanding of the text.⁹²

V. Message

5.1 Paratextual features

To illustrate his perceived incongruities in the received text, Galen made judicious use of the 'paratextual' features of ancient commentaries.⁹³ For each of the aforementioned three perceived parts of the received text, he produced a separate book of commentary, each with its own prefatory remarks.⁹⁴ In each of these prolegomena, he returned to the overall question of authenticity, arguing that each part reveals that it has its own unique author(s). His use of these liminal devices was an important exegetical move in that it created three macro-sense units and reminded the reader at which point he was crossing the threshold of a new work. Having partitioned the received text in this way, he was now able to demonstrate that the theory of the four elements was indeed written by Hippocrates without having to make it conform with the anatomical descriptions in the second part of the text, which were obviously far from the level of sophistication anatomy had reached under Galen and his predecessors. And, by setting apart *On Healthy Regimen* as a treatise written by Polybus, Galen was able to account for some of the minor disagreements he had with this part of the text. Ultimately, these divisions serve to elevate the status of the first part of the text. He could now argue that Hippocrates had dedicated a treatise specifically to the task of demonstrating that the four elements and humours were the nature of man.

In addition to the previously mentioned paratextual features, Galen also partitions the text by writing an epilogue to Book 1 entitled *Concerning the method in the book and that it is of the authentic works of Hippocrates* (Περὶ τῆς κατὰ τὸ βιβλίον μεθόδου καὶ ὅτι τῶν

⁹² HNH, M. 31.18–27 = K. 15.81.16–82.8.

⁹³ By 'paratextual', I am referring to liminal devices, such as the prefatory remarks and division of books, which influence the way a commentary is read. The term comes from Genette's study of how things such as the introduction, binding, illustrations, and title effect the reception of a published work. Genette 1997.

⁹⁴ His prefaces to Book 2 of HNH (M. 57 = K. 15.108–109) and *Hipp. Vict.* (M. 89 = K. 15.174–175) are much smaller in comparison to Book 1 of HNH (M. 3–11 = K. 15.1–16). The preface to Book 1 of HNH is one of the longest and most argumentative of all his Hippocratic commentaries. Galen did not always begin his commentaries with a formal preface. As von Staden notes, 'Galen's commentaries on Hippocratic treatises *Prog.*, *Acut.*, *Epid. II* and *Aph.* likewise have no formal prefaces..., whereas his commentaries on other Hippocratic works, such as *Nat. Hom.*, *Artic.*, *Fract.*, *Off.*, *Epid. I*, *Prorrh. I* and *Epid. VI*, do.' von Staden 2002a, 128, n. 59. However, in the commentaries that do not have formal prefaces, Galen does address some of the introductory questions common to prolegomena via his exegesis of the first lemma (*Prog.* and *Epid. II*) or by writing proems to one or more of the books within a treatise (Books 3 and 7 of *Aph.* and Book 4 of *Acut.*). Mansfeld 1994, 141–145; von Staden 2002a, 119, n. 33.

γνησίῳ Ἰπποκράτους).⁹⁵ In this epilogue, he returns to the question of authenticity claiming that his commentary has demonstrated the authenticity of this first portion of *Nat.Hom.* His claim is largely based on his assumption that the method described in the *Phaedrus* (270c3) is, in fact, demonstrated in this part of the text.⁹⁶ Having quoted the passage from the *Phaedrus* both in his preface and now again in the epilogue, he boldly declares:

But since Plato has written thus, let someone point out to us in which other book of Hippocrates, besides *On the Nature of Man*, one would find this same approach, and if he is not able to do it, let him seek for a no more trustworthy witness of the authenticity of this book than Plato.⁹⁷

In this way, Book 1's exegesis is framed as proof of the claims he made in the preface. By writing a conclusion confirming the claims put forward at the beginning of his commentary, Galen frames Book 1 with the rhetorical features of an argumentative speech, which is rather atypical of commentaries of this period. All of this illustrates his anxiety to influence the audience's perception of the text.

While it seems likely that Galen 'dreamed up' these divisions, it is impossible to be certain that he was the first, or the only, exegete to hold this position because none of his predecessors' or contemporaries' commentaries on *Nat.Hom.* have survived. Some of Galen's remarks suggest that other exegetes recognized incongruities in the text, particularly in regard to *Salubr.* and *Nat.Hom.*⁹⁸ Nevertheless, Galen's divisions would not have been considered unreasonable because they follow the obvious changes in the text's subject matter,⁹⁹ and raising such an issue with the received text was not wrong. In fact, the mark of a good exegete was to recognize where false accretions had occurred in the text. Aspasius (AD c. 100–50) and Alexander of Aphrodisias also questioned the order of presentation as well as the authenticity of parts of the received Aristotelian texts upon which they were commenting.¹⁰⁰

⁹⁵ *HNH*, M. 53.15–16. Not in K.

⁹⁶ The method is to ask, in respect to the body, whether something is complex or simple, and if it is simple, to inquire into what makes it act and upon what does it act.

⁹⁷ ἀλλὰ ταῦτα Πλάτωνος οὕτως γράψαντος ἐπιδειξάτω τις ἡμῖν, ἐν τίνι βιβλίῳ τοῦ Ἰπποκράτους ἑτέρῳ παρὰ τὸ Περὶ φύσεως ἀνθρώπου τὴν μέθοδον ταύτην ἔστιν εὑρεῖν ἢ, εἴπερ οὐκ ἔχει, μηδένα ζητεῖτω Πλάτωνος ἀξιопιστότερον μάρτυρα τοῦ γνήσιον εἶναι τὸ βιβλίον τούτο. *HNH*, M. 54.26–55.3 = 15.104.12–17.

⁹⁸ *HNH*, M. 7–9, 57–58 = K. 15.9–13, 110–111; *Hipp.Vict.*, M. 89 = K. 15.174–175.

⁹⁹ Jouanna has argued the manuscript evidence, as well as the stylistic similarities between *Salubr.* and *Nat.Hom.*, offers enough evidence for one to perceive congruence between these texts. The predilection for the number 'four' (four humours, four fevers, four vessels and four seasons which correspond to the four humours) in Part 1 and Part 2 could be interpreted as reflecting continuity of thought. Jouanna 1975, 52–54; 1999, 399–400. On this basis, he suggests Galen 'dreamed up' these divisions in *Nat.Hom.* Jouanna 2000, 283.

¹⁰⁰ Alexander, in *Metaph.*, 137.1–138.23, 344.1–345.20; Barnes 1999, 20. cf. Mansfeld 1994, 45–47.

And, like Galen, their remarks reveal how a number of factors were capable of raising doubts about the received text, such as their perception of the flow of the argument, of apparent contradictions, of differences in terminology and of the author's intellectual character. With that being said, exegetes customarily oriented their commentary to the divisions of books in the received text, rather than changing them. Therefore, by using these paratextual features, Galen reveals a very aggressive approach to reinforcing his perception of the text.

5.2 Galen's lemmatology

The first three *lemmata* of *HNH* are reproduced here to provide a reference point for the subsequent discussion of Galen's lemmatology.¹⁰¹

I. (corresponding to L. 6.32.2–7) Ὅστις μὲν εἶωθεν ἀκούειν λεγόντων ἀμφὶ τῆς φύσιος τῆς ἀνθρωπίνης προσωτέρω ἢ ὁκόσον αὐτέης ἐς ἱατρικὴν ἀφήκει, τουτέω μὲν οὐκ ἐπιτήδειος ὅδε ὁ λόγος ἀκούειν· οὔτε γὰρ τὸ πᾶμπαν ἥερα λέγω τὸν ἄνθρωπον εἶναι, οὔτε πῦρ, οὔτε ὕδωρ, οὔτε γῆν, οὔτε ἄλλο οὐδέν, ὅ τι μὴ φανερόν ἐστιν ἐν ἑὸν ἐν τῷ ἀνθρώπῳ, ἀλλὰ τοῖσι βουλομένοισι ταῦτα λέγειν παρίημι.

[Galen's Commentary]

II. (corresponding to L. 6.32.4–5) Οὔτε γὰρ τὸ πᾶμπαν ἥερα λέγω τὸν ἄνθρωπον εἶναι, οὔτε πῦρ, οὔτε ὕδωρ, οὔτε γῆν,

[Galen's Commentary]

III. (corresponding to L. 6.32.7–34) Δοκέουσι δέ μοι οὐκ ὀρθῶς γινώσκειν οἱ τὰ τοιαῦτα λέγοντες· γνώμη μὲν γὰρ τῇ αὐτῇ πάντες χρέονται, λέγουσι δὲ οὐ τὰ αὐτά· ἀλλὰ τῆς μὲν γνώμης τὸν ἐπίλογον τὸν αὐτὸν ποιέονται. φασὶ γὰρ ἓν τε εἶναι, ὅ τι ἐστί, καὶ τοῦτ' εἶναι τὸ ἓν τε καὶ τὸ πᾶν, κατὰ δὲ τὰ ὀνόματα οὐχ ὁμολογέουσι. λέγει γὰρ αὐτῶν ὁ μὲν τις ἀέρα τοῦτο εἶναι τὸ ἓν τε καὶ τὸ πᾶν, ὁ δὲ πῦρ, ὁ δὲ ὕδωρ, ὁ δὲ γῆν. καὶ ἐπιλέγει ἕκαστος τῷ ἑωυτοῦ λόγῳ μαρτύριά τε καὶ τεκμήρια, ἃ

¹⁰¹ *HNH*, M. 11.8–14, 13.17–18, 16.12–17.4 = K. 15.16.17–17.6, 21.6–9, 27.1–18. The question of whether Galen actually used full *lemmata* has not, to my knowledge, been fully addressed. The general assumption is that the later manuscripts and edited texts are representative of Galen's method of lemmatisation. Of course, Galen would not be unique in this because the use of full *lemmata* among exegetes is supported by evidence from papyri. del Fabbro 1979, 69–132. cf. Von Staden 2002a, 127–128; Dickey 2007, 107–111.

ἐστὶν οὐδέν. ὅτι γὰρ τῇ μὲν γνώμῃ τῇ αὐτῇ πάντες χρέονται, λεγούσι δὲ οὐ τὰ αὐτά, δῆλον ὅτι οὐδὲ γινώσκουσι, γνοίη δὲ ἂν ὧδέ τις μάλιστα παραγενόμενος αὐτοῖς ἀντιλέγουσι· πρὸς γὰρ ἀλλήλους ἀντιλέγοντες οἱ αὐτοὶ ἄνδρες τῶν αὐτῶν ἐναντίον ἀκροατῶν οὐδέποτε τρὶς ἐφεξῆς ὁ αὐτὸς περιγίνεται ἐν τῷ λόγῳ, ἀλλὰ τοτὲ μὲν οὗτος ἐπικρατεῖ, τοτὲ δὲ οὗτος, ὅτέω ἂν τύχῃ μάλιστα ἡ γλῶσσα ῥυεῖσα πρὸς τὸν ὄχλον. καίτοι δίκαιόν ἐστι τὸν φάντα ὀρθῶς γινώσκειν ἀμφὶ τῶν πρηγμάτων παρέχειν αἰεὶ ἐπικρατέοντα τὸν λόγον τὸν ἑωυτοῦ, εἴπερ ὄντα γινώσκει καὶ ὀρθῶς ἀποφαίνει. ἀλλ' ἐμοὶ γε δοκέουσιν οὗτοι οἱ ἄνθρωποι αὐτοὶ σφᾶς αὐτοὺς καταβάλλειν ἐν τοῖσιν ὀνόμασι τῶν λόγων αὐτῶν ὑπ' ἀξυνεσίας, τὸν δὲ Μελίσσου λόγον ἐπανορθοῦν.

[Galen's Commentary]

The underlined passages signify the parts of the lemma that Galen cites or paraphrases in his exegesis. The highlighted words identify where he has made changes to the text.¹⁰² The bold text points to the clause in the first passage that is repeated to make the second lemma of his commentary. The underlined/highlighted words illustrate just how little of the author's lexis Galen explicitly addresses in a 'word-for-word' exegesis. Like his philosophical contemporaries, Galen was quite selective as to what he would address in the received text. This selective approach allowed him to be more focused on issues that are related to his overall argument.

The first and the third *lemmata* (respectively corresponding to L. 6.32.2–7, 6.32.7–34) of Galen's commentary cover the complete opening argument of the author of *Nat.Hom.* Using these two *lemmata*, Galen has divided the text according to an obvious division in the author's argument, which is marked off with μέν and δέ. The first lemma preserves the author's statement as to his position on monism; the third lemma contains his critique of monistic rhetoric. However, the second lemma is atypical and does not preserve the flow of the author's argument; it is merely a repeated clause from the first lemma. He uses this lemma not to mark off a change in the author's argument; rather, it signifies a change in the subject matter of Galen's exegesis. The reason for repeating this clause is specifically to address Artemidorus Capito's emendation of the text, which was touched upon in the previous section. He notes that Capito's edition of *Nat.Hom.* leaves out οὐτε γῆν from the clause οὐτε

¹⁰² Galen appears to have changed the source text's reading ἐνεόν to read ἐν ἐόν. The question of οὐτε γῆν is discussed in his exegesis under the second lemma of his commentary.

γὰρ τὸ πᾶμπαν ἥερα λέγω τὸν ἄνθρωπον εἶναι οὔτε πῦρ οὔτε ὕδωρ οὔτε γῆν. This emendation was a significant problem for Galen's argument in favour of the four elements in *Nat.Hom.*, because it removed the only place in the text where the author explicitly lists fire, water, air and earth together. Such an emendation was disconcerting, especially given that, as Galen notes, Capito's edition of the Hippocratic treatises was well-regarded (εὐδοκίμησασα) and zealously studied (σπουδαζομένη).¹⁰³ The reason for Capito's emendation to the text, as Galen claims, is due to Capito not finding doxographical evidence that a philosopher had proposed a monistic theory using earth as the prime element. To undermine Capito's position, Galen argues that Capito failed to recognize that not every theory in medicine and philosophy is written down, and those which are recorded are sometimes lost over time or destroyed by catastrophes. Therefore, one should not rely solely on doxographical information.

It is important to recognize that Galen had options as to how and how much to lemmatize the source text. The presentation of the text in commentaries was quite diverse in the second century. Exegetes such as Aspasius and Alexander of Aphrodisias used abbreviated *lemmata* for their commentaries.¹⁰⁴ This method of lemmatization preserved only a small portion of a passage to be commented upon. These abbreviated *lemmata* seem to have served the purpose of allowing the reader to reference the source text as they read these commentaries. Rather than abbreviated *lemmata*, Galen chose to use full *lemmata*, preserving virtually all of the sentences of *Nat.Hom.*¹⁰⁵ Thus, his commentary did not require his audience to consult a source text. In many ways, his commentary became the source text, which was quite useful considering the obvious issues Galen had with the text.

There was no technical term for a textual lemma at this period.¹⁰⁶ Galen often identifies his *lemmata* simply as ῥήσεις, which seems to convey a sense of orality. *HNH* and *Hipp.Vict.*'s *lemmata* vary in length from a short phrase to an extended passage. The length of his exegetical remarks does not always correspond to the length of the lemma. He normally lemmatizes the source text according to an obvious change in theme or in respect to a recognizable division in the author's argument. Often, he begins his exegesis by describing how a passage is related to the author's present line of reasoning. At these points, he occasionally reminds his audience in Book 1 that they are following the arguments of Hippocrates with a statement, such as 'Hippocrates having said before' (προειρηκώς ὁ Ἱπποκράτης), followed by an explanation as to how this lemma fits into the overall

¹⁰³ *HNH*, M. 13.19–22 = K. 15.21.10–14.

¹⁰⁴ Todd 1976, 12–16; Frede 2003; Barnes 1999, 23; Wittwer 1999, 51–84.

¹⁰⁵ The following passages appear to be absent in Galen's *lemmata*: *Nat.Hom.*, Jouanna 1975, 168.3–4, 210.3–5.

¹⁰⁶ Wittwer 1999, 52.

argument.¹⁰⁷ The ostensible purpose of his lemmatization in Book 1 of *HNH* is often to follow the flow of the author's argument, the *logos* of the author. Although this becomes less explicit in Book 2 of *HNH* and *Hipp.Vict.*, his *lemmata*, nevertheless, often preserve changes in subject in text. With that being said, his attention to past exegetical issues illustrates that some of Galen's lemmatization was tralatitious, which is to say, some of his *lemmata* could be found in his predecessors' commentaries.¹⁰⁸

This completes an overview of Galen's lemmatology in *HNH* and *Hipp.Vict.* The following sections will illustrate to what extent Galen's commitment to his overarching argument governs the way he selects his *lemmata* and expounds upon them. This will involve a discussion of how he uses his commentary to argue for the four elements in Book 1 of *HNH* and how he conveys his perception of the authenticity of the text in all three books of commentary via his posture toward the supposed author of each part of *Nat.Hom.* Although it may seem at times that the aim of my analysis is to prove Galen is being deceptive, which is to say he knew his interpretation was flawed and still tried to move it forward, it is important to bear in mind that, given the exegetical principles of the time, most of Galen's explanations were quite reasonable. The point of this analysis is to demonstrate how, in an environment of competing interpretations, Galen used the opportunities this genre provided to make his interpretations cogent and his message persuasive.

5.3 Revealing the elements in *Nat.Hom.*

The author of *Nat.Hom.* shows no interest in arguing that the elements air, water, earth and fire are the φύσις of man. In fact, he never describes his treatise as being an investigation into the elements (στοιχεῖα) or the primary substance (πρώτη οὐσία) or the first principles (αἱ ἀρχαί) of the body. His aim is to disprove monism and to prove that the four humours (blood, phlegm, yellow bile and black bile) are the φύσις of man.¹⁰⁹ Galen shows little to no concern as to whether the author actually uses the term στοιχεῖα. For Galen, the real issue is whether the theory of the four elements was clearly put forward in the author's *logos*. As will be seen, his commentary frames the author's arguments as an 'inquiry into the στοιχεῖα which hold our bodies together'.¹¹⁰ For Galen and others in his society, the theory of the four humours was simply inseparable from contemporary concepts of the four elements being the primary elements of the universe.

¹⁰⁷ *HNH*, M. 28.51 = K. 15.51.1.

¹⁰⁸ Kraus 2002, 16–20.

¹⁰⁹ *Nat.Hom.*, Chap. 2, 5.

¹¹⁰ ἐν δὲ τῷ ζητεῖν τὰ συνθετικά τοῦ σώματος ἡμῶν στοιχεῖα καὶ τῶν τοῦ παντός ἐμνημόνευσεν, ἅπερ ὄντως ἐστὶ στοιχεῖα. *HNH*, M. 53.25–27 = K. 15.102.12–14.

Galen's exegesis of the first lemma of his commentary is central to Galen's argument because he uses it to contextualize the aim of the author. The following is the first lemma of his commentary:

I. (corresponding to L. 6.32.2–7) "Ὅστις μὲν εἶωθεν ἀκούειν λεγόντων ἀμφὶ τῆς φύσιος τῆς ἀνθρωπίνης προσωτέρω ἢ ὁκόσον αὐτέης ἐς ἰατρικὴν ἀφήκει, τουτέω μὲν οὐκ ἐπιτήδειος ὁδε ὁ λόγος ἀκούειν· οὔτε γὰρ τὸ πᾶμπαν ἡέρα λέγω τὸν ἀνθρώπον εἶναι, οὔτε πῦρ, οὔτε ὕδωρ, οὔτε γῆν, οὔτε ἄλλο οὐδέν, ὃ τι μὴ φανερόν ἐστιν ἐν ἑὸν ἐν τῷ ἀνθρώπῳ, ἀλλὰ τοῖσι βουλομένοισι ταῦτα λέγειν παρίημι.¹¹¹

I. The following account is not suitable for him who is in the habit of listening to men speaking about the nature of man beyond what pertains to medicine. For I say man is neither altogether air, nor fire, nor water, nor earth, nor some other one thing being in man which is not manifest. But I leave these things to those who wish to speak about them.

This passage is taken from the author's arguments against the philosophical approaches to monism which put forward that one of the elements (air, fire, water and earth) are the nature of man. The author later distinguishes this type of monism from that of physicians, who, he claims, say that man is made of one humour—either bile or phlegm or blood.¹¹² The above passage posed some potential problems for Galen's argument that Hippocrates held forth the theory of the four elements in *Nat.Hom.* Although this passage is clearly attacking monism, it is far from a ringing endorsement of the four elements pertaining to medicine in that it speaks in a rather dismissive manner about air, fire, water and earth. Moreover, the author could be interpreted as claiming that any discussion of these 'unseen' (μὴ φανερόν) elements in the body went beyond medical inquiry because medicine restricts itself to the observable humours of the body. Such an interpretation finds traction in this work because the author explicitly concludes that the φύσις of man was blood, phlegm, yellow bile and black bile without any mention of any of the four elements.¹¹³ As is evident from the rest of *Nat.Hom.*, the author is, at best, ambivalent toward the elements' role in medicine.

¹¹¹ *HNH*, M. 11.8–14 = K. 15.16.16–17.6.

¹¹² *Nat.Hom.*, L. 6.34.8–10.

¹¹³ *Nat.Hom.*, L. 6.40.15–46.8.

Galen's exegesis puts a positive spin on this statement made by 'Hippocrates'. This was an important passage because the first lemma was often perceived as being where the author expresses the theme (ἐπαγγελία) of a treatise.¹¹⁴ First, Galen introduces doubt as to the meaning of the text. He claims, 'As far as this passage is concerned, it does not seem possible to clearly know what the sentiment of the author (τὴν τοῦ συγγραφέως γνώμην) is.'¹¹⁵ Here, he turns to the exegetical principle of the γνώμη of the author to suggest some ambiguity in regard to what the author means by fire, air, water and earth going 'beyond what pertains to medicine'. Galen's exegesis creates a false dilemma in that he simplifies the author's argument to a choice between the theory of 'the four' elements versus monistic elemental theories. Thus, he points out 'Hippocrates' is not arguing against all these elements being the nature of man; rather, he is arguing against only one of these elements making man. He explains in this passage that the author is claiming that, unlike the theory of the four elements, an elemental monistic theory is not medical for it cannot account for the medical topics of pain and generation.¹¹⁶ In this way, Galen conveniently overlooks the fact that the author never explicitly says that pain is due to the elements. In fact, the author explicitly associates pain only with changes in the humours (*Nat.Hom.*, Chap. 4). Another subtle way in which Galen conveys his own argument is through the terms that 'Hippocrates' speaks in Galen's exegetical remarks. Although the author only lists fire, water, air and earth, Galen's exegesis of this lemma and others has Hippocrates speaking in terms of 'the four' (τὰ τέτταρα) elements.¹¹⁷ In this way, Galen leaves no room for doubt as to the aim of Hippocrates' arguments.

One of the strengths of a running commentary is that it allows its user to interrupt the flow of the text in order to contextualize the author's argument. In many ways, the author's arguments are susceptible to the same types of spin that modern reporters-commentators place on the sound bites of speeches. In the 19th lemma of *HNH* (corresponding to L. 6.38.19–40.2), the author of *Nat.Hom.* finally posits what he claimed he would prove, that is, what is the nature of man by name and nature: 'The body of man has in itself blood and phlegm, and both yellow and black bile, and these are the nature of the body and on account of these things it suffers pain and remains healthy'. When faced with such a definitive statement, which clearly corresponds to the expressed aim of the text, Galen claims that this statement marks a transition in the author's arguments. According to Galen, the author has 'completed his

¹¹⁴ *Hipp.Vict.*, M. 89–90 = K. 15.174–177.

¹¹⁵ "Ὅσον ἐπὶ τῇ ῥήσει ταύτῃ, γινώμαι σαφῶς τὴν τοῦ συγγραφέως γνώμην οὐ πάνυ τι δόξει δυνατόν εἶναι. *HNH*, M. 11.15–16 = K. 15.17.7–8.

¹¹⁶ *HNH*, M. 13.9–14 = K. 15.20.15–21.4.

¹¹⁷ *HNH*, M. 12.2, 18.24, 18.28–29, 18.30, 28.17, 29.11, 32.1–2 = K. 15.18.6, 31.13, 32.3, 32.4, 32.8, 51.10, 52.17, 58.5.

account of the common elements' and is now arguing for the four humours (χυμοί).¹¹⁸ He then proceeds to summarize what the author will say about the four humours in the upcoming passages.¹¹⁹ Galen's narration of the author's argument restricts the aim of the prior discussion to a demonstration of the four elements. In actuality, the author is simply providing evidence that the body must be composed of more than one thing in support of his overall argument that the body is made of four humours. In this way, the author's overall argument is lost or, to put it in more volitional terms, hijacked by Galen's argument, and the reader is left with a text that argues the nature of man is composed of two different kinds of things, elements and humours. In this way, Galen's exegesis of the preceding passages of *Nat.Hom.*, particularly Chapter 3 which deals with generation, becomes extremely important to conveying his perception of the author's arguments.

The third chapter argues that monism is untenable when one takes into account generation. Previously, the author noted that generation cannot occur if hot (τὸ θερμόν) and cold (τὸ ψυχρόν) or dry (τὸ ξηρόν) and wet (τὸ ὑγρόν) are not proportionate to one another (οὐ μετρίως πρὸς ἄλληλα).¹²⁰ This serves to illustrate that more than one thing must be involved in generation. The author concludes, 'Therefore, since the nature of all other things and of man is such as this, necessity says that there is not one thing in respect to man, rather each of the components for genesis have in the body the sort of faculty it contributed.'¹²¹ While his reference to hot, cold, wet and dry marks that the author is aware of four different faculties, he is clearly not making an inquiry into what are the primary constituents of the body. This passage ultimately contributes to the author's later arguments that the four humours have these faculties (δυνάμεις) and that these faculties distinguish the humours from one another, in turn revealing their presence in the body.¹²²

The previously quoted statement is the 14th lemma of *HNH*.¹²³ In his exegesis of this lemma, Galen attempts to explain how the author is clearly arguing for the four elements despite never using the term στοιχεῖα or earth, fire, water and air. Galen claims that when the author uses the terms τὸ θερμόν, τὸ ψυχρόν, τὸ ξηρόν and τὸ ὑγρόν, he is clearly talking about the elements (τὰ στοιχεῖα). To support this claim, he points out that the four elements

¹¹⁸ Τὸ δὲ σῶμα τοῦ ἀνθρώπου ἔχει ἐν ἑωυτῷ αἷμα καὶ φλέγμα καὶ χολὴν ξανθὴν τε καὶ μέλαιναν, καὶ ταῦτ' ἐστὶν ἡ φύσις τοῦ σώματος καὶ διὰ ταῦτ' ἀλγέει καὶ ὑγιαίνει. *HNH*, M. 32.10–12 = K. 15.59.1–4.

¹¹⁹ **Συντελέσας τὸν περὶ τῶν κοινῶν στοιχείων λόγον**...ἐν τῇ προκειμένη ῥήσει μετέβη βουλόμενος ἐξ αἵματος καὶ φλέγματος καὶ χολῆς διττῆς.... *HNH*, M. 32.14–16 = K. 15.59.5–8.

¹²⁰ *Nat.Hom.*, L. 6.38.2–5.

¹²¹ Ἀνάγκη τοίνυν, τῆς φύσιος τοιαύτης ὑπαρχούσης καὶ τῶν ἄλλων ἀπάντων καὶ τῆς τοῦ ἀνθρώπου, μὴ ἐν εἶναι τὸν ἄνθρωπον, ἀλλ' ἕκαστον τῶν συμβαλλομένων εἰς τὴν γένεσιν ἔχειν τινὰ δύναμιν ἐν τῷ σώματι, οἷον περ ξυμβάλλετο. *HNH*, M. 28.3–7 = K. 15.50.11–15 (corresponding to L. 6.38.7–10).

¹²² *Nat.Hom.*, L. 6.40–44.2.

¹²³ *HNH*, M. 28.3–7 = K. 15.50.11–15.

(fire, earth, air and water) embody the supreme qualities (ἄκραι ποιότητες) of hot, cold, dry and wet, which is to say each element possesses the hottest, or coldest, or driest, or wettest quality in respect to each other and all other substances. Therefore, when the author uses the terms τὸ θερμόν, τὸ ψυχρόν, τὸ ξηρόν and τὸ ὑγρόν, he is speaking of the ‘simple and unmixed qualities’ (ἄπλαϊ καὶ ἄμικτοι ποιότητες) which each element represents better than any other matter of the body. Galen then claims that ‘the intermediary bodies’ (τὰ μεταξὺ σώματα)—i.e. things formed by the elements, such as humours and tendons—cannot be ‘legitimately termed’ (κυρίως ὀνομάζειν) τὸ θερμόν, τὸ ψυχρόν, τὸ ξηρόν and τὸ ὑγρόν because they are mixed and, therefore, do not embody the ἄκραι ποιότητες. Galen concludes, ‘Therefore, it is necessary here to understand that he [Hippocrates] is not speaking about the observable things of the human body being hot, cold, dry and wet, but the four elements.’¹²⁴ In this way, he restricts the author to speaking only in terms of extreme qualities rather than merely referring to what may be more or less hot, cold, dry or wet in relation to other things. Considering that the theories of generation in the Hippocratic Corpus generally speak of the seed coming from all the body and the humours and because he is clearly speaking of generation by copulation, what the author means by hot, cold, dry and wet is not self-evident. Although the author seems to be talking in terms of faculties when he speaks about hot, cold, wet and dry, Galen’s exegesis gives them a physicality that is not explicitly in the text by identifying them as primary substances.

Nevertheless, Galen’s explanation is well within his principles of exegesis as he is trying to illustrate the γνώμη of Hippocrates by demonstrating what was implied in these passages. Ultimately, Galen’s exegesis maps the author’s arguments onto a contemporary theory of the four elements. Be that as it may, one must bear in mind that not everyone interpreted the text’s references to hot (τὸ θερμόν), cold (τὸ ψυχρόν), dry (τὸ ξηρόν) and wet (τὸ ὑγρόν) as indicating the four elements. Hence, Galen suggests that these other exegetes have failed to recognize the elemental theory in *Nat.Hom.* because of their lack of erudition. He declares that ‘certain men insensitive to Greek lexis’ (τίνες ἀναίσθητοι λέξεως Ἑλληνικῆς) have failed to recognize that when Hippocrates’ speaks in terms of hot, cold, wet and dry, he is pointing to the ‘common elements of generation’ (τῆς γενέσεως κοινὰ στοιχεῖα), i.e. the four elements.¹²⁵ Ultimately, many of Galen’s arguments for the four elements rely heavily on his perception of the γνώμη of Hippocrates.

¹²⁴ χρὴ τοίνυν μὴ τὰ βλεπόμενα κατὰ τὸ σῶμα τάνθρώπου θερμὰ καὶ ψυχρὰ καὶ ξηρὰ καὶ ὑγρὰ λέγειν αὐτὸν οἶσθαι νῦν, ἀλλὰ τὰ τέτταρα στοιχεῖα. *HNH*, M. 29.9–11 = K. 15.52.11–14.

¹²⁵ *HNH*, M. 31.18–27 = K. 15.81.16–82.8.

5.4 Authenticity and the characterization of the authors

As has been noted already, commentators and their audiences often thought more in terms of ‘the author’ than the ‘text’ in their exegeses.¹²⁶ In addition to being author-centred, ancient scientific commentaries were rather ahistorical in that the exegete often approached the source text’s author very much like a contemporary. Thus, a commentator’s perception of an author’s intellectual and moral character is often conveyed in his appraisal, narration and exegesis of the text. What makes *Hipp.Vict.* and *HNH* interesting is how Galen’s posture toward the author(s) contributes to his arguments for authenticity.

Galen’s appraisal of the truthfulness or clarity of individual *lemmata* was one of the ways in which he revealed the author(s) of each part. In Book 1, his exegetical principle is essentially that the author, Hippocrates, is always right.¹²⁷ If he flags some sort of problem with the text, it is not caused by the author being incorrect in his arguments; rather, it is an issue only because either previous commentators failed to understand the γνώμη or λέξις of Hippocrates or because a transcriber may have introduced an error.¹²⁸ However, in Book 2, Galen almost never agrees with the author(s).¹²⁹ He continually points out how the author has stated something manifestly untrue and/or at odds with Hippocratic thought. He describes passages as unclear (ἄδηλα), confused (συγκεχυμένα), disjointed (ἀδιάρθρωτα) or containing an improper (οὐ κυρίως) use of terminology.¹³⁰ In Book 3, he is not as quick or as committed to defending the author as he is in Book 1. He appears almost condescending in that he makes minor corrections or adds what he feels was left out in order to make the author’s account more accurate.¹³¹ Nevertheless, in contrast to Book 2, he mostly agrees with the author and does not use his disagreements with the text as opportunities to display his hostility toward the author, all of which relate his perception of incongruence in the received text. His assessment and corrections of the text are based on paradigmatic characterizations of the authors, which revolve around notions of the master, disciple and the impostor/false disciple. The master, Hippocrates, is impeccable; the close disciple, Polybus, is almost without fault; and the impostors, those who do not properly understand Hippocrates’ art, can

¹²⁶ Mansfeld 1994, 30, 122, 179–180.

¹²⁷ Galen is not alone in this exegetical principle. As Barnes notes, in regard to Aspasius as a commentator of Aristotle, the interpreter is ‘logically obliged to embrace a principle of charity and ascribe as much truth as he can to the text which he is commenting on’, which is evident when ‘Aspasius runs unsummoned to the master’s aid, and defends him against any possible attack’. Barnes 1999, 30. cf. Sluiter 1995.

¹²⁸ *HNH*, M. 25–26, 31, 40, 41 = K. 15.46–47, 57, 75, 77–78.

¹²⁹ Galen’s exegeses to 19 of the 22 *lemmata* preserved in Mewaldt’s text find the author in error. While nothing is wrong with a commentator finding a text full of errors, as will be seen, he holds the author of the second part to much stricter standards than he does in *Hipp.Vict.* and Book 1 of *HNH*.

¹³⁰ *HNH*, M. (ἄδηλα) 83.21 = K. 15.164.1, (συγκεχυμένα) 66.23 = K. 15.128.12, (ἀδιάρθρωτα) 66.23 = K. 15.128.12, (οὐ κυρίως) 59.13 = K. 15.113.3.

¹³¹ *Hipp.Vict.*, M. 94–96, 105 = K. 15.186–190, 207.

be detected by their gross errors. Thus, Galen declares in the prefatory remarks to Book 3 of his commentary:

Just as *On the Nature of Man* is altogether blameless and the texts that have been interpolated between the two works [i.e. *Nat.Hom.* and *Salubr.*] are completely contemptible, thus *On Healthy Regimen* is for the most part blameless since it always clings to the elementary teachings of Hippocrates.¹³²

As was demonstrated in the previous section, in Book 1 of *HNH* Galen, tries to account for why the author does not use exact terminology by demonstrating what ‘Hippocrates’ actually meant to say. In *Hipp.Vict.*, he often extends a similar courtesy to the ‘Polybus’. Under the seventh lemma (corresponding to L. 6.74.19–76.1),¹³³ Galen notes how the author mentions the temperaments of only two periods in life (ἡλικίαι), corresponding to νέοι and πρεσβύτεροι, when relating the appropriate regimens for such people. Galen’s theoretical position was that there were four general temperaments for the four periods of life, corresponding to τὰ παῖδια, οἱ ἀκμάζοντες, οἱ παρακμάζοντες and οἱ γέροντες. However, rather than criticize the author of *Hipp.Vict.* for failing to recognize this important ‘scientific fact’, Galen only says that the author left out (ἐλλίπειν) the logical divisions of the periods of life. Galen’s ‘exegesis’ of the passage then moves into an explanation of how the four periods of life have four different temperaments. Having done this, he then tries to relate how the author’s advice loosely takes into consideration the four temperaments of life. Galen remarks that the author was suspicious (ὑποπτεύειν) of his own account, and he suggests that the author’s qualifying remarks reveal him to be vaguely aware of the additional changes in temperaments with the other two periods of life.

In the second book of *HNH*, Galen scrutinizes the author(s)’s account looking for errors. For example, in the sixth lemma of Book 2 (corresponding to L. 6.64.3–7), the author speaks about the two periods of life of man, namely, that man is hotter at the beginning of life and colder at the end, which loosely corresponds with what was stated in *Salubr.*¹³⁴ While the author of the text correctly, in respect to Galen’s theoretical position, recognizes the body of man is hottest at the beginning of life and coldest at the end, Galen raises the bar for this author by criticizing him for not properly qualifying his remarks. He points out that the author

¹³² ὥσπερ δὲ ἄμεμπτον μὲν ἐστὶ πάντα τὸ Περὶ φύσεως ἀνθρώπου, μεμπτὰ δὲ πάντα τὰ παρεγγεγραμμένα μεταξύ τῶν δύο βιβλίων, οὕτω τὸ Περὶ διαίτης ὑγιεινῆς ἐν τοῖς πλείστοις μὲν ἄμεμπτόν ἐστιν, ἐχόμενον ἀεὶ τῆς Ἱπποκράτους στοιχειώσεως.... *Hipp.Vict.*, M. 89.9–13 = K. 15.175.3–9. His use of the phrase τῆς Ἱπποκράτους στοιχειώσεως may also serve as a subtle reminder of the theory of four elements.

¹³³ *Hipp.Vict.*, M. 94.16–96.24 = K. 15.185.17–190.3.

¹³⁴ *HNH*, M. 79.3–13 = K. 15.154.7–155.3.

did not say that the growing body is hottest only in respect to its ‘innate’ (ἔμφυτον) heat. Quoting *Aph.* 1.14.1, Galen supports his claim by pointing out that Hippocrates clearly recognized this distinction. Instead of using ἔμφυτον, the author claims that the growing body is hot as a result of its life-force (βίη). Considering how Galen attempts to account for inexact terminology in the other two books of commentary, it would have been possible for Galen to rectify this problem in the text by suggesting that the author meant ἔμφυτον when he used βίη. Instead, Galen uses this ‘error’ as a stepping stone to point out how the author has misunderstood or misheard (παράκῆκεν) the most important principle which Hippocrates himself taught. Thus, in Book 2 of *HNH*, Galen is far less inclined to use the γνώμη of the author to rectify lexical problems.

Galen’s characterizations of the author(s) also support his argument for authenticity. In Book 1, he confirms that the author’s statements are logically sound and reflect the *logos* of Hippocrates by noting how, in these passages, ‘Hippocrates always follows the observable evidence’.¹³⁵ Elsewhere, he notes how the author used ‘not only the strongest but also the shortest argument’ (οὐ μόνον ἰσχυροτάτῳ χρησάμενος ἀλλὰ καὶ βραχυτάτῳ λόγῳ) to refute monism.¹³⁶ In this way, Galen reminds the audience of what he has already expressed in the preface to Book 1 of *HNH* and elsewhere, that is, Hippocrates’ writings contain ‘noteworthy matters’ (ἀξιόλογα) that are ‘well-expressed and concise’ (διὰ βραχέων καλῶς εἰρημένα).¹³⁷ If Galen does note that the author seemingly has departed from being concise, he is quick to explain why this was necessary. For example, the author appears to repeat himself when he states that ‘all things both come into being in a similar way, and perish in a similar way’ (corresponding to L. 6.38.14–15).¹³⁸ Galen explains that this somewhat repetitive statement was necessary since Hippocrates foresaw that there would be men who would later misinterpret what he meant by τὸ θερμόν, τὸ ψυχρόν, τὸ ξηρόν and τὸ ὑγρόν.¹³⁹ Hence, he projects the author as being careful in his explanation rather than thoughtlessly repetitious.

His characterization of the author(s) in Book 2 is far less flattering. In the last section of the second part of the text (corresponding to L. 6.66.5–68.16), Galen depicts the author as merely ‘paraphrasing’ (μεταφράζειν / παραφράζειν) passages from the *Aphorisms* (*Aph.*

¹³⁵ Ο μὲν οὖν Ἱπποκράτης αἰεὶ τοῖς ἐναργῶς φαινομένοις ἀκολουθεῖ· δία τοῦτο καὶ νῦν ἔφη.... *HNH*, M. 24.19–20 = 15.43.15–44.1.

¹³⁶ *HNH*, M. 21.9–10 = K. 15.36.13–14.

¹³⁷ *HNH*, M. 8.14–18 = K. 15.11.7–11. cf. Sluiter 1995, 519–534.

¹³⁸ cf. *Nat.Hom.*, L. 6.38.7–10

¹³⁹ *HNH*, M. 31.18–27 = K. 15.57.3–15.

4.76, 77), which is a reasonable assessment given the strong similarities between them.¹⁴⁰ He also points out how the author has erred when he claims that quotidian fever lasts less time than a tertian, which, according to Galen, is not consistent with what Hippocrates expressed in the *Epidemics* and the *Aphorisms*. Furthermore, he notes how the author used the terms σύνοχον and οὐρήματα, which he claims do not occur anywhere else in the Hippocratic Corpus nor in any other writers of the period.¹⁴¹ Therefore, he concludes that ‘these are the terms of more recent physicians who were ignorant of the ancient λέξις.’¹⁴² All of these are entirely reasonable issues to raise with the text. Even so, these problems do not reveal the intellectual and moral character of the author. Nevertheless, Galen ridicules the author as being one of the fortune-telling (προφητεύσαντες) quack doctors in Alexandria. He then suggests that the author could be a sophist (σοφιστής) or a knave (πανούργος), ‘as seems likely, since he appended this lie so that he might inflict blame on the ancient author.’¹⁴³ Thus, Galen’s exegesis devolves into an *ad hominem* attack on the author. And, the audience is left with a distinct impression that the author is an enemy of Hippocrates rather than a disciple like Polybus. These last exegetical remarks provide a suitable conclusion for his arguments for authenticity since here is where he makes his strongest argument against Sabinus’ and the other exegetes’ claims that *Nat.Hom.* was written by Polybus.

Galen’s perception of the value of these three parts may be reflected in his lemmatization. In Book 2, Galen generally speeds the audience through the source text by using large portions of it for his *lemmata*. In Books 1 and 3, he uses almost twice as many *lemmata* to cover an equal amount of text.¹⁴⁴ Nevertheless, in Book 2, his exegetical remarks are in many places quite protracted. These points are where his exegesis becomes more like a diatribe against the author than an attempt to explain the meaning of the text.

This is especially evident in his exegesis of the anatomical descriptions of the vessels in Book 2. Galen divides the author’s account (corresponding to L. 6.58.1–60.14) into two *lemmata* (the sixth and seventh lemmata in Mewaldt’s text).¹⁴⁵

¹⁴⁰ *HNH*, M. 84.3–14 = K. 15.164.15–165.11.

¹⁴¹ A *TLG* search seems to confirm Galen’s claims on this matter, at least, in regard to the works ascribed to Hippocrates.

¹⁴² ...ἀλλὰ ταῦτα ὀνόματα νεωτέρων ἐστὶν ἰατρῶν, ὅσοι τὴν παλαιὰν λέξιν ἠγνόησαν. *HNH*, M. 88.10–11 = K. 15.172.18–173.1.

¹⁴³ ὁ ταῦτα γράψας ἢ τοιοῦτος ἢ σοφιστής ἢ πανούργος ἄνθρωπος, ὡς ἔοικεν, παρεγγράψας τὸ ψεῦδος ἕνεκα τοῦ προστρίψασθαι ψόγον τῷ παλαιῷ. *HNH*, M. 88.5–7 = K. 15.172.12–14.

¹⁴⁴ *HNH*, Book 1 = 2.2 (*lemmata* for every page of L.); *HNH*, Book 2 = 1.3; and *Hipp.Vict.* = 2.4. This feature cannot be simply attributed to Galen trying to preserve the anatomical account in the text because long *lemmata* that are non-anatomical in nature also contribute to this disparity.

¹⁴⁵ *HNH*, M. 67.14–68.15, 75.8–11 = K. 15.130.4–132.6, 146.4–7.

II. 6 (corresponding to L. 6.58.1–60.11) Αἱ παχύταται τῶν φλεβῶν ὥδε πεφύκασιν· τέσσαρα ζεύγεά ἐστιν ἐν τῷ σώματι, καὶ ἐν μὲν δὴ αὐτέων ἀπὸ τῆς κεφαλῆς ὀπισθεν διὰ τοῦ αὐχένος ἔξω παρὰ τὴν ῥάχιν ἔνθεν τε καὶ ἔνθεν εἰς τὰ ἰσχία ἀφικνέεται καὶ εἰς τὰ σκέλεα, ἔπειτα διὰ τῶν κνημέων ἕως τῶν σφυρῶν τὰ ἔξω καὶ εἰς τοὺς πόδας διήκει· δεῖ οὖν τὰς φλεβοτομίας τὰς ἀπὸ τῶν ἀλγημάτων τῶν ἐν τῷ νώτῳ καὶ τοῖς ἰσχύοις ἀπὸ τῶν ἰγνύων ποιέεσθαι καὶ ἀπὸ τῶν σφυρῶν ἔξωθεν. αἱ δὲ ἕτεραι φλέβες ἔχουσαι τὴν ἀρχὴν ἀπὸ τῆς κεφαλῆς παρὰ τὰ οὖα διὰ τοῦ αὐχένος, αἱ σφαγίτιδες καλεόμεναι, ἔσωθεν ἀπὸ τῆς κοίλης παρὰ τὴν ῥάχιν ἐκατέρωθεν φέρουσι παρὰ τὰς ψόας καὶ ἐς τοὺς ὀρχιας καὶ ἐς τοὺς μηρούς καὶ διὰ τῶν ἰγνύων ἐκ τοῦ ἔσωθεν μέρους, ἔπειτα διὰ τῶν κνημέων ἐπὶ τὰ σφυρὰ τὰ ἔσωθεν καὶ εἰς τοὺς πόδας· δεῖ οὖν τὰς φλεβοτομίας ποιέεσθαι πρὸς τὰς ὀδύνας τὰς ἀπὸ τῶν ψοῶν καὶ τῶν ὀρχεων ἀπὸ τῶν ἰγνύων καὶ ἀπὸ τῶν σφυρῶν ἔσωθεν. αἱ δὲ τρίται φλέβες ἐκ τῶν κροτάφων διὰ τοῦ αὐχένος ὑπὸ τὰς ὠμοπλάτας, ἔπειτα συμφέρονται ἐπὶ τὸν πνεύμονα καὶ ἀφικνέονται ἢ μὲν ἐκ τῶν δεξιῶν εἰς τὰ ἀριστερά, ἢ δὲ ἐκ τῶν ἀριστερῶν εἰς τὰ δεξιὰ, καὶ ἢ μὲν δεξιῇ ἀφικνέεται ἐκ τοῦ πνεύμονος ὑπὸ τὸν μαζὸν καὶ ἐς τὸν σπλῆνα καὶ ἐς τὸν νεφρόν, ἢ δὲ ἀπὸ τῶν ἀριστερῶν εἰς τὰ δεξιὰ διὰ τοῦ πνεύμονος ὑπὸ τὸν μαζὸν καὶ ἐς τὸ ἥπαρ καὶ ἐς τὸν νεφρόν, τελευτῶσι δὲ ἐς τὸν ἀρχὸν αὗται ἀμφότεραι. αἱ δὲ τέταρται ἀπὸ τοῦ ἔμπροσθεν τῆς κεφαλῆς καὶ τῶν ὀφθαλμῶν ὑπὸ τὸν αὐχένα καὶ ὑπὸ τὰς κληῖδας, ἔπειτα δὲ ἀπὸ τῶν βραχιόνων ἄνωθεν εἰς τὰς συγκαμπάς, ἔπειτα διὰ τῶν πήχεων εἰς τοὺς καρπούς καὶ τοὺς δακτύλους, ἔπειτα δὲ ἀπὸ τῶν δακτύλων πάλιν διὰ τῶν χειρῶν καὶ τῶν πήχεων ἄνω ἐς τὰς συγκαμπὰς καὶ διὰ τῶν βραχιόνων τοῦ κάτωθεν μέρους εἰς τὰς μασχάλας καὶ ἀπὸ τῶν πλευρῶν ἄνωθεν ἢ μὲν εἰς τὸν σπλῆνα ἀφικνέεται, ἢ δὲ εἰς τὸ ἥπαρ, ἔπειτα ὑπὲρ τῆς γαστρὸς ἐς τὸ αἰδοῖον τελευτῶσιν ἀμφότεραι. καὶ αἱ μὲν παχεῖαι τῶν φλεβῶν ὥδε ἔχουσιν· εἰσὶ δὲ καὶ ἀπὸ τῆς κοιλίας φλέβες ἀνὰ τὸ σῶμα πάμπολλαί τε καὶ παντοῖαι, δι' ὧν τῷ σώματι τροφαὶ ἔρχονται.

II. 7 (corresponding to L. 6.60.11–14) Φέρουσι δὲ καὶ ἀπὸ τῶν παχεῶν φλεβῶν εἰς τὴν κοιλίην καὶ εἰς τὸ ἄλλο σῶμα καὶ ἀπὸ τῶν ἑξωτάτω καὶ ἀπὸ τῶν εἴσω, καὶ εἰς ἀλλήλας διδόασιν αἱ τε εἴσωθεν ἕξω καὶ αἱ ἕξωθεν εἴσω.

[Galen's commentary]

As can be seen, he uses a rather large portion of the text for his sixth lemma and a much shorter passage for the seventh. Considering that he has preserved almost the whole anatomical account in the sixth lemma, this segmentation is somewhat odd since the seventh lemma neither offers anything substantially different from the material in the first nor does it mark a clear transition in the author's account. Under the sixth lemma, Galen has written an extensive commentary which both demonstrates the anatomical inaccuracies expressed in the lemma and lampoons the author for writing such a fictional account. Galen declares that much of this fanciful anatomical description was like the hallucinations of drunken men (ἐνυπνίοις μεθύοντων ἔοικε), and that it is so inaccurate that it even leaves out what blind men (οἱ τυφλοί) can discern with their fingers.¹⁴⁶

Under the seventh lemma, the focus of Galen's exegesis moves from the subject matter of the text to the overall question of authorship. His exegesis begins with an *ad hominem* attack on the author. Echoing the mythological tradition which describes how Prometheus created man from clay,¹⁴⁷ he ridicules the author by calling him 'the new Prometheus' (ὁ νέος Προμηθεύς), indicating that the author has totally fabricated a new anatomy for man. He then characterizes the author as one who 'in his greediness, he has disgraced himself by adding that the vessels from the belly carry nourishment to the body'.¹⁴⁸ Galen goes on to argue that, just as the author of this anatomical account says nothing true, Hippocrates 'says nothing untrue at all in the second book of the *Epidemics*', and therefore, Hippocrates could not have written such a fallacious account.¹⁴⁹ He points out that the exegetes of Hippocrates, those who call themselves Hippocratics (Ἱπποκράτριοι) yet do not know anything about anatomy, failed to recognize this fact. Therefore, these men ascribe *Epidemics II* and this anatomical account to the same author. Galen then broadens his

¹⁴⁶ HNH, M. 67.14–68.15, 75.8–11 = K. 15.130.4–132.6, 146.4–7. cf. Jouanna 2000, 281–283.

¹⁴⁷ Ar., *Av.*, 686; Paus. 10.4.4; Hor., *Carm.*, 1.16.13–16; OCD 1999, 1254.

¹⁴⁸ Ἡρκεῖ μὲν τῷ νέῳ Προμηθεῖ τὰ τέσσαρα ζεύγη τῶν φλεβῶν, οὐ μὲν ἡρκέσθη γε αὐτός, ἀλλ' ὑπ' ἀπληστίας ἡσχημόνησε προσθεῖς αὐτοῖς τὰς ἐκ τῆς κοιλίας ἀναφερούσας τὴν τροφήν εἰς τὸ σῶμα. HNH, M. 75.12–14 = K. 15.146.9–12.

¹⁴⁹ καθάπερ δ' οὖν ἐπὶ τῆς νῦν εἰρημένης ἀνατομῆς οὐδὲν ὅλως οὐδ' ἄχρι ῥήματος ἐνὸς ἀληθὲς εἶπεν ὁ πλάστης αὐτῶν, οὕτως ἐπὶ τῆς κατὰ τὸ δευτερον τῶν Ἐπιδημιῶν οὐδὲν ὅλως ὁ Ἱπποκράτης ἐψεύσατο. HNH, M. 75.18–21 = K. 15.147.1–5.

exegetical horizon by returning to his argument that the first part and the second part of the received text are obviously incongruent. He claims that for an author who is writing a treatise (σύγγραμμα) on the elements to add an anatomical account of the vessels is unacceptable and illogical. His rationale is that a σύγγραμμα is a refined piece of writing which has a clear theme. He argues that abrupt changes in subject matter in the second part of *Nat.Hom.* have the stylistic features of ‘outlines’ (ὑποτυπώσεις) rather than treatises.¹⁵⁰ Thus, the seventh lemma functions as a kind of coat hook that allows Galen to hang his argument for authenticity. He points out how exegetes have failed to recognize the obvious incongruence in the received text, and therefore, they reveal themselves to be clearly ignorant of the intellectual character of Hippocrates. What also makes this lemmatization interesting is the way in which Galen seems to justify it. Galen sarcastically describes the seventh lemma as the author’s ‘finishing stroke’ (κολοφών) to his description of the four blood vessels.¹⁵¹ Thus, he suggests a recognized transition or progression in the author’s anatomical account. In actuality, Galen is simply projecting his own change in subject onto the author given that Galen is the one using this lemma to write a suitable κολοφών to his exegesis of this anatomical account.

VI. Conclusion

While it is difficult to know if Galen’s audience perceived his arguments to be compelling, his commentary certainly had far-reaching effects on the perception of *Nat.Hom.* Centuries after Galen, when the medical commentary had reached its zenith as a genre of medical education in the Renaissance, a physician named Eustathius Quercetanus wrote a commentary to *Nat.Hom.* for the explicit purpose of providing an example of medical theory for his students. Quercetanus’ understanding of *Nat.Hom.* was clearly influenced by *HNH*. His commentary covers only what Galen claims to be the actual contents of *Nat.Hom.*, i.e. the first part of the received text.¹⁵² Furthermore, Quercetanus claimed that by writing a commentary to *Nat.Hom.*, he was, in effect, teaching the Hippocratic method. Quercetanus undoubtedly intended to write his own exegesis of *Nat.Hom.*, and his lemmatization certainly bears this out; nevertheless, the issues he raises and the explanations he gives reflect much of what Galen has to say in Book 1 of *HNH*. In this way, *HNH* clearly had an effect on the way in which *Nat.Hom.* was studied in medical education. Aside from the practice of medicine,

¹⁵⁰ cf. *Hipp.Vict.*, M. 89.3–14 = K. 15.174.5–175.9.

¹⁵¹ *HNH*, M. 75.14–16 = K. 15.146.12–14.

¹⁵² Quercetanus, E. 1549. I would like to thank Dr. Rütten for bringing this text to my attention.

this commentary seems to have had far-reaching effects on the scholarly perception of *Nat.Hom.* As Jouanna points out, following Galen's lead, the editors of Hippocrates from the 16th to the 19th century separated the text into two treatises: *Salubr.* and *Nat.Hom.*¹⁵³ However, Galen's argument that the second part of *Nat.Hom.* had a different author from the first was not so persuasive as to influence these later editors–commentators to divide the text accordingly. Be that as it may, the persuasive force of Galen's argument through his skilful use of the formal features of this genre clearly contributed to this extensive *Nachleben*.

¹⁵³ Jouanna 2000, 283.

Promoting the Study of Medicine:
The προτρεπτικός λόγος and *Exhortatio ad medicinam*

I. Introduction

Galen's *Exhortatio ad medicinam* (*Protr.*) is the most oratorical text in the Galenic Corpus.¹ As will be seen, it is replete with the style and argumentation one would expect to find in public orations of the 2nd century AD. While the Greek title of *Protr.* is not without its problems, the phrase προτρεπτικός ἐπ' ἰατρικὴν was, at least, part of the original title, and therefore, it is explicitly identified as an exhortation to medicine.² In what survives of this rhetorical artefact, Galen is ostensibly trying to persuade the audience to take up the study of the arts, particularly medicine. The existence of a second part to this text is revealed in the following transitional statement at the end of *Protr.*:

Therefore, unless his soul is absolutely bestial, a young man should take up and practice one of these arts (τεχνῶν), and the very best among them, as we claim, is medicine; this point shall be shown next.³

This transitional statement suggests that there was a second part to *Protr.*, which argued for the superiority of medicine in comparison to the other τέχναι.⁴ What effect this second part, if it had been preserved, would have had on our assessment of the text as a whole we cannot say. However, what we do possess of the text is both sufficient and worthy of analysis because it contains a self-standing, polished argument that is representative of the kinds of rhetorical strategies Galen deemed to be προτρεπτικός. With this in mind, unless specified otherwise, when I discuss the content and purpose of *Protr.*, I am naturally speaking about the extant portion of the text.

¹ The Greek text used for *Protr.* comes from Boudon 2002, 84–117 = K. 1.1–39, which will appear in this chapter as B. I have greatly benefited from Boudon's introduction and analysis of *Protr.* (Boudon 2002, 3–42) as well as Singer's translation. Singer 1997a, 35–52.

² The question has been raised as to whether the last part of the title should read προτρεπτικός ἐπ' ἰατρικὴν or προτρεπτικός ἐπὶ τὰς τέχνας as it does in some manuscripts. There is a consensus among scholars that the last part of the title of this work should read ἐπ' ἰατρικὴν because the alternate title, ἐπὶ τὰς τέχνας, seems to reflect a later interpretation of the extant text's contents. Furthermore, in his remarks about *Protr.*, Jerome (AD 347–420) identifies it as an *exhortatio medicinae*. *Adv. Iovinian.*, 2.11 (*PL* 23 col. 300 B). Thus, it is safe to assume that at least part of the title of *Protr.* should read: προτρεπτικός ἐπ' ἰατρικὴν. Barigazzi 1991, 70–73, 77–79; Boudon 2002, 35–42; Perilli 2004, 81–89.

³ ἐκ τούτων οὖν τίνα τῶν τεχνῶν ἀναλαμβάνειν τε καὶ ἀσκεῖν χρή τὸν νέον, ὅτῳ μὴ παντάπασιν ἡ ψυχὴ βοσκοματώδης ἐστί, καὶ μᾶλλον γε τὴν ἀρίστην ἐν ταύταις, ἥτις, ὡς ἡμεῖς φάμεν, ἐστὶν ἰατρικὴ· τοῦτο δ' αὐτὸ δεικτέον ἐφεξῆς. *Protr.*, B. 117.14–18 = K. 1.39.6–10.

⁴ Boudon 2002, 6–7, 146, n. 4.

Protr. has two main arguments.⁵ The first demonstrates the value of τέχνη (Chap. 2–8), and the second argues that ‘the vocation of athletes’ (τὸ τῶν ἀθλητῶν ἐπιτήδευμα) is not a τέχνη (Chap. 9–14). Chapter 1 functions as the *exordium*. In this chapter, Galen points out that mankind’s capacity for learning τέχνη separates him from the animals, and by the practice of an art, particularly one of the divine arts (θεῖαι τέχνη), man shares something in common with the gods. Starting with Chapter 2, Galen begins to praise the virtues of learning a τέχνη by contrasting it with the other option, namely leaving one’s life to chance (τύχη), which Galen personifies as the deity Fortune (Τύχη). Chapter 2 describes the fatuous appearance and capricious character of the deity Fortune. Chapter 3 contrasts this description of Fortune with that of Hermes in order to demonstrate that Hermes, whom Galen holds forth as the god of τέχνη, has a trustworthy appearance and benevolent nature. Chapter 4 reflects upon the egregious character and the dreadful fates of the followers of Fortune. These followers are contrasted with the noble and illustrious disciples of Hermes in Chapter 5. Starting with Chapter 6, Galen criticizes three goods—wealth, noble birth and physical beauty—which are not worthy of praise because they are bestowed by chance rather than by skill. The first of these, namely wealth, is addressed in Chapter 6. Here, he points out that wealthy men who seek possessions often neglect acquiring the one thing that would give them self-worth: the practice of an art. In Chapter 7, he discusses why relying on one’s noble birth is useless unless it spurs him on to improve himself through study. In Chapter 8, he remarks on the fleeting benefits of youthful, physical beauty. He points out that it is necessary for youths to pursue the arts so that they will have a beautiful soul, which will continue to provide them with honour and a good life when their physical beauty fades. At the end of Chapter 8, Galen provides a conclusion to the first main argument by using a *chreia*, which illustrates how it is foolish to allow the aforementioned goods of chance to prevent a youth from actually caring for himself by the practice of an art.

Beginning with Chapter 9, Galen takes up the second main argument. He claims that although athletics is held in honour by the masses, it is not a τέχνη. In Chapter 10, he begins his refutation of the claims made by an unnamed proponent of athletics. In this refutation, he systematically undermines the notion that athletics is an art by proving that it does not produce natural goods (ἀγαθὰ ἐν τῇ φύσει), which he identifies as those of the soul (ψυχῇ), the body (σῶμα) and the external (ἐκτός) kind. Most of his attack focuses on the goods of the body which are commonly attributed to athletics training, namely health (Chap. 11), beauty (Chap. 12) and strength (Chap. 13). In Chapter 14, he briefly discounts the notion that athletics provides bodily pleasure and a good income, claiming that only τέχνη lead to

⁵ An analytical outline of *Protr.* can be found in Appendix B.

financial security and honour. Having finished his refutation, Galen uses the last part of Chapter 14 to provide a suitable *peroratio* to what he has covered so far. Here, echoing his statements in the *exordium*, he points out the differences between rational (λογικαί) and manual (χειρωνακτικαί) arts and concludes that a young man (νέος) should take up one of the rational arts, of which medicine is the best.

II. Genre

2.1 Protr. and the προτρεπτικός λόγος in rhetoric and philosophy

From the 4th century BC onward, the terms προτρεπτικός and προτροπή were used in rhetorical theory to describe the whole or part of a discourse (i.e. speech or writing) that urged the audience to take a line of action by discussing how it was just (δίκαιον), lawful/customary (νόμιμον), expedient (συμφέρον), good (καλόν), pleasant (ἡδύ) and/or easy (ῥάδιον) to do what was being advised.⁶ Conversely, dissuasive (ἀποτρεπτικός) discourse was described as using the antitheses of the aforementioned topics to move the audience away from taking a particular action. Therefore, in rhetorical theory, a προτρεπτικός was primarily associated with extolling the virtues of a particular action. In rhetorical handbooks, both προτρεπτικός and ἀποτρεπτικός λόγος were associated with, but not delimited to,⁷ private and public deliberative rhetoric. By the time Galen was writing, such protreptic and dissuasive techniques were commonly associated with declamations.⁸ These stylized speeches often revolved around hypothetical moral questions, such as ‘Should Agamemnon sacrifice his daughter Iphigenia?’, to which the orator was to respond by giving his answer in the persona of a historical or mythological character related to the question. While these declamations were initially for preparing youths for the law courts, thanks to the epideictic orators of 2nd century AD, these speeches became public displays of erudition in which ‘sensational pathetic appeals’ and ‘inflated style’ were commonplace.⁹ While such rhetorical manners of argumentation were generally denounced for not being ‘scientific’ by

⁶ RA, Fuhrmann 1966, 1.1.1–2.35.8; Aristotle, *Rh.*, 1358b8–13, 1399b.32–1400a.14; Theon, *Prog.*, 116.27–117.6.

⁷ Προτρεπτικοὶ λόγοι were also associated with epideictic oratory. For example, in a rhetorical handbook on epideictic discourse (c. 3rd–4th century AD) ascribed to Dionysius of Halicarnassus, one finds a section entitled Προτρεπτικός ἀθληταίς. The ostensible purpose of this speech is to encourage the contestants before participating in an athletic contest. Ps. D.H., *Rh.*, Radermacher 1905, 283–292; Russell and Wilson 1981, 377–381. Earlier in this same handbook, the author also advised, in regard to funeral speeches, that the orator should transition into a τὸ προτρεπτικόν, which exhorts the audience to pursue similar things as the deceased. Ps. D.H., *Rh.*, Radermacher 1905, 280; Slings 1995, 176.

⁸ The evolving character of Roman and Greek declamations is treated in the following two seminal works: Bonner 1949; Russell 1983.

⁹ Mendelson 1994, 92.

philosophically minded individuals such as Galen, the rhetorical techniques of epideictic orators were undoubtedly influential on the way in which one approached public oration, especially when the speech was designed to urge a general audience toward virtue.¹⁰

The earliest example of the term προτρεπτικός λόγος being applied to philosophical discourse comes from Plato's *Euthydemus* (282d.4–6).¹¹ Here, Socrates describes his dialogue with a young man, Cleinias, as his example (παράδειγμα) of a προτρεπτικός λόγος.¹² Socrates' example is an investigative dialogue (278e–282d) that begins with an examination of the goods (ἀγαθά) which are indicative of a man prospering (εὖ πράττειν). His examples of these goods are health (τὸ ὑγιαίνειν), wealth (τὸ πλουτεῖν), physical beauty (τὸ καλὸν κατὰ τὸ σῶμα), being well-borne (εὐγένεια), and power (δύναμις). Socrates claims that the greatest of all these possessions should be identified as good fortune (εὐτυχία). He proceeds to show how wisdom (σοφία) makes a man fortunate because it keeps him from erring in whatever endeavour he is involved; hence, wisdom leads to εὐτυχία. He then points out that the mere possession of goods is not enough to make one happy (εὐδαίμων); rather, one needs to know how to use them, and wisdom provides the ability to properly use these goods. This investigation ends with Socrates' conclusion that it is necessary to practice philosophy (φιλοσοφεῖν) because it is the only thing that makes a man happy (εὐδαίμων) and successful (εὐτυχής). The result of this speech is Cleinias' declaring that he will pursue philosophy. This investigative dialogue is described by Socrates as his particular (ἰδιωτικός) example of a προτρεπτικός λόγος.

Plato contrasts Socrates' protreptic with Dionysodorus' 'exhortation to virtue' (παρακελευστικός ἐπ' ἀρετῇ) by describing the Sophist's protreptic as a 'marvelous' (θαυμαστός) speech which was 'worthy to hear' (ἄξιος ἀκοῦσαι).¹³ Thus, he points out how Socrates' dialectical protreptic is different from the exhortations of the two Sophists Euthydemus and Dionysodorus, men who had brashly claimed to be able to teach virtue (ἀρετή) better and faster than others (273d), because Socrates' method of exhorting logically leads Cleinias to pursue wisdom while the Sophists' exhortations are merely clever rhetorical

¹⁰ Arrian, *Epict.*, 3.23. The perceived differences between philosophical and 'Sophistic' rhetoric are treated in Kennedy 1999, 29–126. As to the relationship between Sophists and physicians during the 5th and 4th century BC, see Kennedy 1989. However, as was noted in my introduction, I do not take the position that there was one recognizable group in the 2nd century AD who could be called Sophists, and likewise, the term 'Sophistic rhetoric' is not a concept which truly delineates the rhetorical practices of a group. q.v. p. 17. My use of the term 'Sophists' in this chapter denotes individuals whose epistemological aims are perceived as being eristic rather than philosophic, which is a common characterization of 'Sophists' in philosophical writings.

¹¹ The approaches that modern scholarship has taken to define philosophical protreptics can be found in the following: Hartlich 1889; Gaiser 1959; Slings 1981; 1995; Jordan 1986; Stowers 1986; Schenkeveld 1997; van der Meeren 2002; Starr 2004; Swancutt 2004.

¹² Slings 1981, 70–71; Swancutt 2004, 133. Galen's awareness of the contents of *Euthd.* is evident in *Hipp.Progn.*, K. 18b.237.6–238.2.

¹³ Plato, *Euthd.*, 282d–283b.

arguments which are designed more for public appeal rather than a serious approach to philosophy.¹⁴

From the 4th century BC onward, the term προτρεπτικός λόγος was used as the title or subtitle for a range of texts.¹⁵ One of the most widely known and influential philosophical protreptics was Aristotle's Προτρεπτικός. Unfortunately, Aristotle's *Protrepticus* only survives in *testimonia* and *fragmenta*. While there has been and continues to be scholarship dedicated to reconstructing Aristotle's *Protrepticus*, primarily on the basis of Iamblichus' (AD c. 245–325) *Protrepticus*, the actual contents and structure of Aristotle's *Protrepticus* still remain problematic.¹⁶ With that said, Galen makes no reference to Aristotle's *Protrepticus* in any of his works.

The importance of *Euthd.*, as well as other similar Platonic dialogues, should not be understated, given that much of the subsequent discussion of προτρεπτικοὶ λόγοι often harks back to the Socratic figure, one who persuades his audience both by demonstrating the virtues of the philosophical life and by refuting the doctrines of false teachers.¹⁷ In subsequent philosophical protreptics, one often finds a perceived tension between groups vying to teach virtue.¹⁸ However, even when one speaks in terms of Sophists and philosophers, the distinction between these groups is not always clear because having a serious approach to teaching virtue was not delimited to any one group.¹⁹ Therefore, how an author characterized his approach to teaching virtue, as well as his opponent's, became a common topic by which the writer/speaker established his authority. In the philosophical protreptic, it was commonplace to characterize the alternative approach as being more rhetorical or sophistic in order to legitimize one's own approach. For example, in Πρὸς τοὺς ἀναγιγνώσκοντας καὶ διαλεγόμενους ἐπιδεικτικῶς (3.23), Epictetus (mid 1st–early 2nd century AD) distinguishes a philosophical protreptic from the practices of speechmaking philosophers who merely eulogize about social mores rather than urging the audience to take up a serious approach to ethics.

By the time Galen was writing, a προτρεπτικός λόγος was commonly identified as a type of philosophical discourse whose aim was to incite the audience toward virtue with the understanding that this is found through a philosophical approach to ethics. By 'type', I am not implying that it was thought of strictly as a literary form. It is quite clear that

¹⁴ Swancutt 2004, 133, n. 41.

¹⁵ Slings 1995, 173, n. 1.

¹⁶ Rabinowitz 1957; Chroust 1965; Düring 1969; Hutchinson and Johnson 2005; Schneeweis 2005. As to the ancient *testimonia*, see Rabinowitz 1957, 23–41; Düring 1969, 21–23.

¹⁷ Slings 1995, 180–185. As to the protreptic dialogues of Plato, see Festugière 1973.

¹⁸ Swancutt 2004, 131–143.

¹⁹ Isoc., *Ad Dem.*, 3–5; Swancutt 2004, 138–143.

philosophical protreptics could appear in a variety of forms, such as poetry, dialogues, recorded speeches and letters.²⁰ Rather than a literary form, the protreptic was recognized by its aim and function in ethical philosophy, in other words, a type of speech act. Philo of Larissa (159/8–84/3 BC) describes the tasks of the protreptic stating:

It is proposed that each of these [parts] are what is called προτρεπτικός λόγος: The protreptic is a discourse that urges toward virtue. Of protreptic, one part demonstrates what a great profit virtue is, the other refutes those who are destroying and slandering virtue or are mistreating it in any other way.²¹

Epictetus identifies the προτρεπτικός λόγος, along with the refutative (ἐλεγκτικός) and didactic (διδασκαλικός), as a type/style (χαρακτήρ) of philosophical discourse. He describes a protreptic as ‘the ability to show either one or many the contradiction they are rolling around in, and to show that they are concerning themselves with everything other than what they want. They want the things which lead to happiness, but they’re looking for them some place else’.²² These quotes reveal two different methods of exhorting an audience to seek virtue.²³ In Epictetus’ case, the philosopher focuses on criticizing men for not pursuing virtue, but in Philo’s protreptic, the philosopher is both extolling virtue and refuting those who assail it. Nevertheless, both methods have a similar aim: to incite the audience toward virtue. As will be seen, when Galen identifies *Protr.* as a προτρεπτικός ἐπ’ ἱατρικὴν, he is evoking the philosophical connotations of a προτρεπτικός λόγος.²⁴

2.2 Protreptic discourse and the acquisition of students

The implicit goal of many of these philosophical protreptics was to make the audience aware of the need for instruction. In ethical philosophy of the 2nd century AD, the protreptic discourse was perceived as the preliminary step before moral therapeutics. For authors such as Philo of Larissa, Epictetus and Clement of Alexandria (b. AD c. 150), a προτρεπτικός

²⁰ Stowers 1986, 91–94; Burgess 1987, 229–31; Schenkeveld 1997, 205.

²¹ κείται τοίνυν ἑκάτερον τούτων ἐν τῷ προσγορευομένῳ προτρεπτικῷ λόγῳ: ἔστι γὰρ ὁ προτρεπτικός ὁ παρορμῶν ἐπὶ τὴν ἀρετὴν. τούτου δ’ ὁ μὲν ἐνδείκνυται τὸ μεγαλωφελές αὐτῆς, ὁ δὲ τοὺς ἀνασκευάζοντας καὶ κατηγοροῦντας ἢ πῶς ἄλλως κακοηθισμένους ἀπελέγει. *Liber de philosophorum sectis* (epitome ap. Stobaeum), Mullach 1867, 55.1.16–21. Slings 1995, 179.

²² - Τί οὖν, οὐκ ἔστιν ὁ προτρεπτικός χαρακτήρ;

- Τίς γὰρ οὐ λέγει; ὡς ὁ ἐλεγκτικός, ὡς ὁ διδασκαλικός. τίς οὖν πῶποτε τέταρτον εἶπεν μετὰ τούτων τὸν ἐπιδεικτικόν; τίς γὰρ ἔστιν ὁ προτρεπτικός; δύνασθαι καὶ ἐνὶ καὶ πολλοῖς δεῖξαι τὴν μάχην ἐν ᾗ κυλίουται, καὶ ὅτι μᾶλλον πάντων φροντίζουσιν ἢ ὧν θέλουσιν. θέλουσι μὲν γὰρ τὰ πρὸς εὐδαιμονίαν φέροντα, ἀλλὰ οὐ δ’ αὐτὰ ζητοῦσι. Arrian, *Epict.*, Schenkl 1916, 3.23.33.1–35.1; Slings 1995, 175.

²³ Slings attributes Epictetus’ protreptic approach to a ‘Cynic-inspired’ method of ‘criticizing people who have their priorities wrong’. He observes that Philo’s method is more in line with what was understood as a Socratic approach to exhortation. Slings 1995, 182, 191. While these are not hard-fast divisions for all philosophical protreptics, they do illustrate two different approaches to urging the audience to virtue.

²⁴ Boudon 2002, 3–5.

λόγος was depicted as being analogous to a physician's act of convincing the potential patient of the need for treatment by revealing his disease.²⁵ In other words, it was the moral diagnosis that moved the audience to trust their soul to the ψυχῆς ἰατρός.²⁶ Thus, in the 2nd century AD, there was a distinction made between a protreptic discourse and one that provides advice to the beginner.²⁷ This distinction is evident in Clement's *Protrepticus* and *Paedagogus* as well as in Galen's comments in *Aff.Dig.* where he states:

Now if indeed you wish to have virtue instead of vices or the peace of the soul instead of titillations of the body, you must practice the way that was explained to you, by proceeding toward temperance through the practice of self-control. But if indeed you wish to have no regard for virtue, or to be titillated throughout your whole body, you should now leave off from this discussion. For it is not a protreptic to virtue (προτρεπτικός ἐπ' ἀρετήν), rather, for those who have been persuaded, it is an expository of the way (ὕφηγητικός τῆς ὁδοῦ) by which someone may obtain it.²⁸

Here, he distinguishes a προτρεπτικός ἐπ' ἀρετήν from a ὕφηγητικός τῆς ὁδοῦ to illustrate that these are two distinct types of ethical discourse. The understood aim of a προτρεπτικός ἐπ' ἀρετήν was to persuade the audience of their need for the treatment of their souls' πάθη. The aim of the ὕφηγητικός τῆς ὁδοῦ was to provide advice for beginners as to how to go about recognizing the different errors and passions of the soul as well as how to treat them. Therefore, in this passage, a προτρεπτικός ἐπ' ἀρετήν is an exoteric discourse that incites the uninitiated audience to submit to a set of moral teachings.

Exhortations to moral therapeutics, as well as works that eulogized the benefits of a particular sect or a τέχνη, were commonly perceived, at this time, as being exoteric discourses which were designed for the acquisition of students. Although Lucian (b. AD c.

²⁵ Arrian, *Epict.*, 3.23; Philo, *Liber de philosophorum sectis* (epitome ap. Stobaeum), Mullach 1867, 55.1.12–55.2.1. For Clement of Alexandria, the λόγος of God played this role in the redemption of souls. Clement, *Paed.*, 1.1.1.3.1–2.1.1.

²⁶ The Platonic origins of the ψυχῆς ἰατρός are discussed in Robinson 2000.

²⁷ Slings 1995, 181–191; Schenkeveld 1997, 204–205. This difference between exhortation and advice is sometimes evident by the terminological distinction between προτρεπτικός and παραινέσις (advice). However, as Swancutt and others have argued, παραινέσις was also used to identify texts that are protreptic in nature, and Hartlich's characterization of these terms creates a 'false dichotomy'. Jordan 1986, 313; Starr 2004, 73–76; Swancutt 2004, 113–114.

²⁸ εἰ μὲν οὖν ἦτοι τὴν ἀρετὴν ἀντὶ τῆς κακίας ἔχειν ἐθέλεις ἢ τὴν γαλήνην τῆς ψυχῆς ἀντὶ τῶν τοῦ σώματος γαργαλισμῶν ἀσκητέον ἐστὶ σοὶ τὸν εἰρημένον τρόπον ἐπὶ σωφροσύνην βαδίζοντι δι' ἐγκρατείας· εἰ δ' ἦτοι τὴν ἀρετὴν ἀτιμάζειν ἢ γαργαλίζεσθαι βούλει δι' ὅλου τοῦ σώματος, ἥδη καταλείπτεον τὸν λόγον τοῦτον. οὐ γὰρ ἐστὶ προτρεπτικός ἐπ' ἀρετήν, ἀλλὰ τοῖς προτετραμμένοις ὕφηγητικός τῆς ὁδοῦ, καθ' ἣν ἂν τις αὐτὴν κτήσασατο. *Aff. Dig.*, K. 5.33.15–34.6. The term ὕφηγητικός is later used by Diogenes Laertius (3.49) to classify Platonic dialogues that were held to be expository.

120) does not call *Par.* a προτρεπτικός λόγος, the dialogue in this work clearly echoes the kinds of protreptic arguments used in *Euthd.*

In *Par.*, one observes the dialogue between two men, Tychiades and Simon. At the beginning, Tychiades asks his friend Simon what art (τέχνη) does Simon possess that allows him to live a good life without having to work. After denying that he has any knowledge of music, medicine, geometry and rhetoric, Simon tells Tychiades that the secret to his life of ease is that he practices the art of being a social parasite (παράσιτος). Using a dialogue that mocks Plato's dialectical protreptics, Simon proceeds to demonstrate how the art of the παράσιτος is superior to other τέχναι and how it would be beneficial for his friend to learn this art. At the end of this discussion, having been convinced by Simon of his need to take up the art of the παράσιτος, Tychiades declares:

I must agree. Hereafter, just like schoolboys (παῖδες), I will come to you both in the morning and in the afternoon to learn your art. You would be just to teach me ungrudgingly since I will be your first student. They say that mothers love their first children more than the others.²⁹

By having Tychiades claim that he will become like a παῖς to Simon, Lucian reveals that the ultimate purpose of praising the art of the παράσιτος is to acquire Tychiades as a student. And, Tychiades demonstrates to his new found *paedagogus* that he is a quick student by attempting to persuade Simon to give him free lessons.

While *Par.* is clearly designed to satirize the debate between rhetoric and philosophy in Plato's dialogues, its humour is also derived from the contemporary practices of philosophers and artisans who praised their art for the purpose of acquiring students.³⁰ For example, Galen points out that physicians, as well as philosophers, were writing superficial works specifically to promote their own sect by praising it.³¹ Although such eulogistic works would have been considered protreptic under the rhetorical rubric of προτρεπτικός,³² a truly philosophical προτρεπτικός λόγος was understood as speaking about the acquisition of wisdom and virtue with the implicit understanding that the speaker was able to show the initiate how to acquire these things.

²⁹ 'Ὁμολογεῖν ἀνάγκη. καί σοι λοιπὸν ὥσπερ οἱ παῖδες ἀφίξομαι καὶ ἔως καὶ μετ' ἄριστον μαθησόμενος τὴν τέχνην. σὺ δέ με αὐτὴν δίκαιος διδάσκειν ἀφθόνως, ἐπεὶ καὶ πρῶτος μαθητὴς σοι γίγνομαι. φασὶ δὲ καὶ τὰς μητέρας μᾶλλον τὰ πρῶτα φιλεῖν τῶν τέκνων. Lucian, *Par.*, Harmon 1921, 61.13–18.

³⁰ cf. Lucian, *Vit.Auct.*

³¹ *Ord.Lib.Prop.*, Boudon-Millot 2007a, 89.16–20 = K. 19.51.7–12.

³² Slings 1981, 74–76; 1995, 191. Although in rhetorical theory there is a distinction made between ἔπαινος and προτροπή (Arist., *Rh.*, 1358b; *Rh. Al.* 1421b, 1425b), in practice, they are less distinct because a protreptic to an art or philosophy naturally takes up praising the benefits of such an education, and many of the topics described in theoretical approaches to ἐγκώμια (Theon, *Prog.*, 109–110) also belong to προτροπή.

2.3 *Protr. and the Galenic Corpus*

In *Protr.*, Galen does not discuss *Protr.*'s relationship to other works in the Galenic Corpus. Furthermore, in *Lib.Prop.*, the only text that makes mention of *Protr.*, Galen places it in a context which does not, in any obvious way, correspond with the arguments put forward in the extant text. Galen lists *Protr.* under the thematic category of *Works expressing differences with the Empiric doctors*.³³ Thus, he seats *Protr.* among a list of titles, such as his *Empirical Outlines* (ὑποτυπώσεις ἐμπειρικοί), *On Empirical Medicine* (περὶ τῆς ἰατρικῆς ἐμπερίας) and *Synopsis of Heracleides' 'On the Empirical Sect'* (σύνοψις τῶν Ἡρακλείδου περὶ τῆς ἐμπειρικῆς αἰρέσεως), which obviously addresses the topic of Empiricism.³⁴ The other troubling contextual issue *Lib.Prop.* presents is the phrase εἰς τὸ Μηνოდότου Σεβήρῳ, which occurs right before the phrase προτρεπτικός ἐπ' ἰατρικὴν. Whether the phrase εἰς τὸ Μηνოდότου Σεβήρῳ belongs to the actual title of *Protr.* has been the subject of much scholarly debate.³⁵ Boudon has argued that it seems likely that the title of this work was indeed εἰς τὸ Μηνოდότου Σεβήρῳ προτρεπτικός ἐπ' ἰατρικὴν,³⁶ which suggests that *Protr.* is Galen's response to a work written to Severus by the noteworthy Empiricist Menodotus of Nicomedia (c. early 2nd century AD).³⁷ However, in *Protr.* Galen never mentions Menodotus or a work entitled *To Severus*, and furthermore, Galen's polemical remarks are clearly directed toward the proponents of athletics training rather than the Empiricists.

As to why Galen would include *Protr.* in the aforementioned thematic category, perhaps he perceived himself as rebutting the Pyrrhonistic ideas that were associated with the teachings of some Empiricists.³⁸ In the late 2nd century AD, the physician-philosopher Sextus Empiricus, who appears to have been tutored by Menodotus' tutee Herodotus of Tarsus, wrote a series of works criticizing the epistemological merits of teaching the sorts of subjects

³³ Περὶ τῶν τοῖς ἐμπειρικοῖς ἰατροῖς διαφερόντων. *Lib.Prop.*, Boudon-Millot 2007a, 163.8 = K. 19.38.11–12.

³⁴ Boudon 2002, 163.8–17 = K. 19.38.11–21.

³⁵ Barigazzi 1991, 70–73, 77–79; Boudon 2002, 35–42; Boudon-Millot 2007a, 217, n. 13; Perilli 2004, 81–89.

³⁶ Boudon 2002, 35–42. Hunayn Ibn Ishāq, in his Arabic translation of *Lib.Prop.*, mentions Menodotus in this passage, which indicates that this is not simply a later scribal error as some have argued. Boudon-Millot 2007a, 217, n. 13.

³⁷ Galen mentions Menodotus numerous times, often in less than favourable terms, in his other works on medical sects and Empiric doctrine. From Galen's writings, Menodotus was apparently a prolific writer and a formidable presence in medicine. *Nat.Fac.*, K. 2.52.11; *Thras.*, K. 5.860.03; *Lib.Prop.*, K. 19.38.14, 19; *MM*, K. 10.136.7–137.3, 140.17–143.14; *Cur.Rat.Ven.Sect.*, K. 11.277.4, 11.285.4; *Subf.Emp.*, 2.65–69, 2.82–90; *Med.Exp.*, 3.87. English translations of the Arabic texts *Med.Exp.* and *Subf.Emp.* can be found in Frede and Walzer 1985, 34–36, 42–45, 51. Information regarding the figure of Menodotus in Galen's writings is found in Perilli 2004.

³⁸ Galen held a general hostility toward Pyrrhonists, especially in regard to their views on physiology, and he evidently links the Empiricists to this sect of philosophy. *Temp.*, K. 1.589–90; *Art.Sang.*, K. 4.727; *Dig.Puls.*, K. 8.711, 781–3; *Ord.Lib.Prop.*, K. 19.40–1; *Subf.Emp.*, 2.82–4, Frede and Walzer 1985, ix–xi, 42–45.

An overview of the development of medical empiricism and the Empiricist's relationship to Pyrrhonists can be found in Hankinson 1995.

usually associated with the ἐγκύκλιος παιδεία: grammar, rhetoric, geometry, mathematics, astrology/astronomy, music and logic.³⁹ The thrust of Sextus' arguments was that everything that is a matter of art is self-evident, and therefore, it can be taught, but everything that is not a matter of art is not evident, and therefore, it cannot be taught. Because everything that is an art is self-evident, then there is little need for professors of these arts, and there is certainly no need of professors of the arts which are not evident. Thus, his argument is ultimately against the Dogmatists. However, there is no evidence to suggest that Menodotus' opinion on the arts was similar to Sextus'. Furthermore, in *Protr.*, Galen does not explicitly undermine the kinds of epistemological tenets that Empiricists and/or Skeptics put forward.

Although it is possible that Galen took up a discussion of the Empiricists' or Skeptics' epistemological theories in the no longer extant part of *Protr.*, from what remains, there is nothing to suggest that Galen was about to attack these groups' doctrines because he never lays down the logical grounds for a discussion of medical or philosophical theory. It is plausible that Galen has retrospectively linked *Protr.* to works against Empiricists for bibliographical purposes, and therefore, this thematic category has nothing to do with the original rhetorical context of *Protr.*'s argument. Whatever the case may be, *Protr.*'s relationship to Menodotus and the Empiricists remains unclear from a strict reading of the text.

Protr. is the only work in the Galenic Corpus with the term προτρεπτικός in its title. That said, in some of his works, particularly those dealing with ethics, Galen's arguments turn to what modern scholars commonly recognize as a philosophical protreptic. For example, Walzer identifies a chapter from Περὶ ἡθῶν, in which Galen gives 'a solemn exhortation, based on an allegorical understanding of a fable, to live a philosophical life', as being reflective of 'proteptikoi logoi'.⁴⁰ What makes *Protr.* quite different from these kinds of diatribes is that the whole text of *Protr.* is committed to exhorting the audience to take up the study of medicine; in other words, it is an 'explicit protreptic'.⁴¹

III. Audience

3.1 Ideal audience

³⁹ The association of Sextus with Menodotus is somewhat tenuous because it is based solely on Diogenes Laertius' statement which relates that Menodotus was the tutor to Herodotus of Tarsus, who in turn was the tutor of Sextus Empiricus. *D.L.*, 9.116.

⁴⁰ Walzer 1954, 243–245. cf. Walzer 1949.

⁴¹ The distinction between explicit and implicit protreptics has been previously made in Slings 1981, 70–73.

Galen's ideal audience for *Protr.* is clearly a group of youths. After demonstrating the value of possessing a τέχνη, Galen exhorts his audience, 'Come (ἄγετε) then, children (ὦ παῖδες), you who have heard my words: begin your education in an art!'⁴² Galen uses the same term of address in a subsequent statement which echoes what he said at the beginning of this work, namely that the practice of the rational arts is what man shares with the gods.⁴³ However, earlier in *Protr.*, he uses the singular vocative, ὦ μειράκιον (young man), ostensibly to address an individual.⁴⁴ In the case of ὦ μειράκιον, Galen is not directly addressing the audience; rather, he is invoking a rhetorical figure who represents the age group he is admonishing. Thus, he uses this figure to exhort young men not to trust in their youthful beauty but to care for their souls.⁴⁵ With that being said, the second person singular pronominal and verbal is the most common way in which Galen addresses his audience.⁴⁶ Thus, he primarily speaks to the individual. Such a personal appeal seems consistent with the aim of a protreptic to medicine given that the taking up of this study is a personal, rather than a corporate, decision.

In addition to these terms of address, Galen indicates that this work is for young men (νέοι).⁴⁷ This brings us to the question of what is Galen implying when he uses ὦ παῖδες to address his ideal audience of νέοι. In *Euthd.*, Cleinias is referred to as a μειράκιον and νεανίσκος, but he is only addressed by Socrates with the term of address ὦ παῖ (276a,c).⁴⁸ In rhetorical situations, such as *Euthd.*, when ὦ παῖ is used in a context where a young man or men are 'unrelated to the speaker', it often connotes affection and seems to emphasize 'not so much the youth of the addressee as the age, wisdom and benevolence of the speaker'.⁴⁹ This seems to be what Galen is trying to convey about his relationship to the ideal audience. It should be said that this audience is rather unique seeing how *Protr.* is the only work in the Galenic Corpus where he uses the vocative ὦ παῖδες to address the audience. This vocative, coupled with Galen's numerous warnings and exhortations, conveys a strong sense of concern for the moral-intellectual wellbeing of these youths. By his association of the imperative ἄγετε and the vocative ὦ παῖδες in the aforementioned phrase, ἄγετε οὖν, ὦ παῖδες, the

⁴² ἄγετε οὖν, ὦ παῖδες, ὅποσοι τῶν ἐμῶν ἀκηκοότες λόγων ἐπὶ τέχνης μάθησιν ὥρμησθε. *Protr.*, B. 100.1–2 = K. 1.20.4–5. In Greek prose, this form of address is used for a variety of different relationships between the speaker and the addressee. While παῖδες has the lexical meaning of 'children', it does not necessarily denote the age of the addressees. Dickey 1996, 65–72, 266–267.

⁴³ *Protr.*, B. 101.3 = K. 1.21.4.

⁴⁴ *Protr.*, B. 99.16–17 = K. 1.19.13. Dickey 1996, 72–74.

⁴⁵ *Protr.*, B. 96.3–98.17 = K. 1.15.9–18.11.

⁴⁶ The frequency of occurrence of the second person singular (pronominal and verbal) in the body is 0.74%, while the plural (pronominal and verbal) is 0.12%. Appendix C, Table 2.

⁴⁷ *Protr.*, B. 97.20, 100.17, 117.14–16 = K. 1.17.17, 21.1, 39.6–8.

⁴⁸ Dickey 1996, 75.

⁴⁹ Dickey 1996, 76.

audience is meant to understand that Galen sees himself as a kind of παιδαγωγός. In other words, he is suggesting that, for those παῖδες ‘who have heard my words’, he will introduce them to the art of medicine.⁵⁰

The aim and subject matter of *Protr.* are explicitly directed toward issues concerning wealthy young men. The types of rational arts that Galen is recommending his audience pursue were generally associated with higher education, namely the ἐγκύκλιος παιδεία, which only the truly privileged had the means to study. In the 2nd century AD, the ἐγκύκλιος παιδεία included, but was not delimited to, logic, arithmetic, music, astronomy, grammar, rhetoric and geometry.⁵¹ These types of studies were considered to be the sign of an ideal education. Although such studies could be taken up at later stages in life, the decision as to whether or not to pursue higher education began around the age of 14 or 15 but was of critical concern for ἔφηβοι (18–20 year olds) and νέοι (early 20s) because this would largely determine their choice of career.

At the beginning of *Somn.*, Lucian claims that he was in his late teens (πρόσηβος), having just finished school, when his father and friends began to discuss what type of education he should receive. Lucian recounts how his decision between education (παιδεία) and handicraft (τέχνη τῶν βαναύσων) was influenced by a dream in which these two career paths, personified as the two goddesses Παιδεία and Τέχνη, came to him in the night in an effort to persuade him to choose one of them.⁵² He relates how he chose Παιδεία, and looking back on the ramifications of this choice, he claims that he has written down this dream ‘in order that young men (οἱ νέοι) may be turned (τρέπωνται) toward the better things and cleave to education’.⁵³ This story illustrates how at this juncture in a young man’s life, there was an important crossroads, and it is at this crossroads that the youth may need some help to pick the right path. Therefore, protreptic works, such as Plato’s *Euthd.*, Lucian’s *Somn.* and Galen’s *Protr.*, are portrayed as speaking to this rhetorical situation.

3.2 Galen’s opponent

The ideal audience is not the only addressee in *Protr.* As was noted earlier, Galen’s arguments against athletics training are stylized as his refutation of an unnamed proponent of

⁵⁰ The terms παιδαγωγός and παιδαγωγεῖν occur predominantly in Galen’s writings related to the diagnosis and treatment of the soul: *Aff.Dig.*, *Pecc.Dig.* and *QAM*. In *Aff.Dig.* (K. 5.31), Galen remarks how beginners (ἀρχόμενοι)—by which he means an individual of any age—who want to learn how to control the passions of their souls, need a παιδαγωγός to observe them and point out their mistakes.

⁵¹ *Protr.*, B. 116.20–117.18 = K. 1.38.9–39.10. As to the ἐγκύκλιος παιδεία, see Eyre 1963; Russell 1989; Morgan 1999.

⁵² Lucian, *Somn.*, Harmon 1921, 1.1–12.

⁵³ ...ὅπως οἱ νέοι πρὸς τὰ βελτίω τρέπονται καὶ παιδείας ἔχωνται, καὶ μάλιστα εἴ τις αὐτῶν ὑπὸ πενίας ἐθελοκακῇ καὶ πρὸς τὴν ἥττω ἀποκλίνει, φύσιν οὐκ ἀγεννῇ διαφθείρων. Lucian, *Somn.*, Harmon 1921, 230–231 = 18.2–6.

athletics.⁵⁴ In Chapter 10, Galen begins to use the second person singular to attack an unnamed individual's claims about the benefits of athletics training. The audience is made aware that they are observing a debate when Galen suddenly demands that his opponent provide witnesses to counter those he just presented: 'Tell me, then, the names of your athletes; but you say nothing because you have nothing to say, unless you suspect the witness as not being trustworthy (εἰ μὴ τι τοῦ μάρτυρος ὥς οὐκ ἀξιόχρεω κατέγνωκας).'⁵⁵ Galen projects his opponent as a rather uncouth debater when he asks, 'Therefore, how is it possible, when you are the one bringing forward matters of great importance, that you would give yourself the authority of passing judgment having taken it away from men wiser than you?'⁵⁶ This individual is subsequently described as a man who seeks popular opinion and relies solely on rhetorical arguments. From this point forward, Galen uses the second person singular when referring to the opposing arguments or questions he is addressing. This unnamed 'you' should not be viewed as representative of the ideal audience. He is a faceless opponent who serves as a straw man for Galen's arguments against athletics training.

Although Galen never identifies who his opponent is in *Protr.*, it seems that he has in mind an athletics trainer. In *Thras.*, Galen describes being involved in a public debate with an athletics trainer (γυμναστής) who had found fault with Hippocrates' views on massage.⁵⁷ The trainer is depicted as arguing in a coarse and loud manner, which Galen contrasts with his own refined, more philosophical approach. Judging from the way Galen contextualizes his arguments against athletics in Chapters 9–14 of *Protr.*, a similar figure seems to emerge. In both *Thras.* and *Protr.*, he portrays his opponent as being ignorant of the etiquette of argumentation, and in both works, he appears to be engaging his opponent in a public setting. However, unlike *Thras.*, *Protr.*'s debate is conducted in front of his ideal audience of youths. This is made evident in Chapter 9 when, before addressing his opponent, he claims that he is now going to prepare these youths by examining beforehand (προδιασκεψασθαι) the practice of athletics so that the deceptions of this false art will not remain unforeseen (ἀπρόσκεπτος) to them.⁵⁸

Therefore, much like the two Sophists in *Euthd.* represent the proponents of a false approach to wisdom, Galen portrays himself demolishing the arguments of a proponent of a false art. And, in both works, the debate is conducted before the prospective student.

⁵⁴ *Protr.*, B. 102.23–116.19 = K. 1.23.1–38.9. See Appendix B. as to the content of this argument.

⁵⁵ Λέγε δή μοι καὶ σὺ τὰς τῶν ἀθλητῶν προσαγορεύσεις· ἀλλ' οὐκ ἔρῃς, ὅτι μὴδ' ἔχεις εἰπεῖν, εἰ μὴ τι τοῦ μάρτυρος ὥς οὐκ ἀξιόχρεω κατέγνωκας·.... *Protr.*, B. 102.12–14 = K. 1.23.1–3.

⁵⁶ Πῶς ἂν οὖν, ἐνθα περὶ πρωτείων ὁ ἀγὼν ἐστί, σαυτῷ διδοίης τῆς κρίσεως τὴν ἐξουσίαν ἀφελόμενος αὐτὴν τῶν σοφωτέρων ἢ κατὰ σαυτόν. *Protr.*, B. 103.2–5 = K. 1.23.11–13.

⁵⁷ *Thras.*, K. 5.894–896.

⁵⁸ *Protr.*, B. 100–101 = K. 1.20–21.

However, the way in which Galen brings his opponents into this discourse is quite different from the narrated dialogue of *Euthd.* Stylistically, *Protr.* is similar to the approach taken in the moral discourses ascribed to Epictetus by Arrian (AD 86–160). In these discourses, the speaker often responds to an imagined interlocutor in an agonistic manner in order to demonstrate the correct way to educate one's soul.⁵⁹ Thus, the audience is presented with only the speaker's response to the arguments of his interlocutor/opponent.

3.3 Historical audience

While it is clear that *Protr.* is stylized as a public speech, the rhetorical setting of this speech is unclear. However, Galen clearly has in mind the activities associated with γυμνάσια.⁶⁰ Although γυμνάσια were originally places associated with physical and military training during the Classical period, they became, more and more, places of intellectual and political education where philosophers and rhetoricians bestowed their teaching. By the 2nd century AD, the γυμνάσια had become important cultural centres that provided not only physical but also intellectual training to ἑφηβοί and νέοι. The intellectual education offered was via formal and informal lectures on rhetorical, literary and musical topics.⁶¹ Prominent figures in various fields, such as philosophy and medicine, sometimes gave lectures or taught courses within γυμνάσια.⁶² The physical training offered in γυμνάσια during this period varied from the traditional athletic exercises to health-oriented exercises, such as exercising with a rubber ball, which Galen advocates in *Parv.Pil.*⁶³ With the increasing focus on bodily health during the imperial period, *gymnasia* also became places of physical as well as mental health, where physical training was now—an aim in and of itself—a way of relaxing body and mind. Therefore, it is plausible that the rhetorical setting Galen has in mind is in or around the γυμνάσιον seeing how this would be a logical place for Galen to come into contact with such a group of youths and his stylized opponent. Historically speaking, it is not so far-fetched to imagine such a setting for *Protr.* because of the 'extensive evidence for doctors lecturing in *gymnasia*, or else more permanently attached to *gymnasia* in an official capacity'.⁶⁴ With that being said, I am not claiming that Galen ever

⁵⁹ Arrian, *Epict.*, 1.2, 3.23.

⁶⁰ Information on the image of athletic training, athletes and the role of the gymnasium can be found in Jüthner 1909, 1–74; Delorme 1960; Miller 2004; König 2005. Much of what I have to say here is derived from König's insightful treatment of the subject, particularly Galen's agonistic approach to athletic trainers. König 2005, 254–301.

⁶¹ König 2005, 51.

⁶² König 2005, 45–72.

⁶³ König points out that *gymnasia* often had special rooms for ball games (*sphairisteria*). König 2005, 33–34, 48, 280–281, 284–291.

⁶⁴ König 2005, 257.

actually made this speech at a γυμνάσιον⁶⁵ but that the historical audience of *Protr.* would have likely envisioned such a setting.

If we look at *Protr.* in the light of Galen's other works that address athletics, an image of *Protr.*'s historical audience comes into view.⁶⁶ Works such as *Thras.*, *San.Tu.* and *Parv.Pil.* all promote the physician, rather than the athletics trainer, as the appropriate source of knowledge concerning healthy diet and exercise. These writings seem to reflect the existence of an agonistic relationship between medical practitioners and athletics trainers when it came to matters of health.⁶⁷ However, unlike the audiences in all three of the aforementioned works, which appear to be written for Galen's usual circle of friends and students, *Protr.* clearly speaks to a general audience of uninitiated youths. With that being said, Galen's attack on athletics may have been conducted for more than this ideal audience; it may have been for a general audience of wealthy, health-conscious individuals, the kind of men who also sent their sons to γυμνάσια to be educated physically and mentally. Of course, as is the case with other philosophical protreptics, the text could just as well have been appreciated by an esoteric audience. In other words, there is no reason to doubt that Galen's philosophically inclined friends would have read *Protr.* and perceived it to be a clever testimony to the intellectual value of medicine. Nevertheless, the work is explicitly pitched for his ideal audience.

IV. Author

4.1 Authorial presence

Galen maintains his presence throughout *Protr.* by his use of both first person singular and first person plural pronominal and verbal forms. There is no substantial quantitative difference between his usage of the singular versus plural form;⁶⁸ however, there is a qualitative difference. In general, the plural connotes 'we', as in mankind, rather than 'we', as in a specific group of people. When he uses 'we' in this way, it is from the perspective of what is ideal for man. For example, he claims, 'if we fall far short of the virtue of our

⁶⁵ In *Protr.*, Galen mentions a *gymnasion* only in a *chreia* attributed to Aristippus in which it is portrayed as a sign of Greek civilization. *Protr.*, B. 89–90 = K. 1.8.

⁶⁶ König 2005, 254–300.

⁶⁷ The agonistic relationship between the two is probably overstated by Galen. However, philosophical authors placed the two fields on equal footing, describing both as arts concerning the body. Iamblichus of Chalcis, *Protr.*, 6.37.26–38.22, 10.54.12–56.2. (Both of these passages are associated with Aristotle.) And, one finds the Philostratus (late 2nd and early 3rd century AD), in his praise of proper athletic training, making an obvious attack on the role of medicine in matters of health. Philostr., *Gymn.*, 44; König 2005, 301–344. Furthermore, like medicine, athletic training had its own collection of technical writings, which dates back to the 5th century BC. König 2005, 314, n. 42; Jüthner 1909, 8–26.

⁶⁸ Appendix C, Table 7.

forefathers, it would pain those men if they could perceive it, and our shame is that much greater the more conspicuous our family.’⁶⁹ The first person singular is used either to interject personal opinion with verbs, such as οἶμαι or combinations of ἐμοὶ δοκεῖ, or to present his arguments against his unnamed opponent. The latter use of the first person is evident when he declares, ‘And on account of this, I would say [athletics] is not a profession of health, it is the vocation of disease.’⁷⁰

4.2 Poetry, literature and authorial identity

What makes *Protr.* stand out from other works in the Galenic Corpus is its reliance on quoting poetry, history and myths to support the arguments that are being advanced.⁷¹ Although many of his scientific treatises contain literary citations, Galen uses them sparingly because he had a less than favourable view of the value of poetry in scientific discourse.⁷² In *PHP*, he remarks how premisses that use the testimonies (μαρτυρίαι) of poets and the observations of lay people are rhetorical because they deal only with plausibility rather than demonstrable truths.⁷³ It is quite clear that in *Protr.*, he does not aim at being scientific, which is to say, he does not employ apodeictic, as well as dialectic, premisses. His reliance on non-scientific testimony, however, is consistent with philosophical discussions of virtue as evinced by philosophers such as Epictetus and philosophically inclined authors such as Plutarch. This kind of discourse lent itself to the use of illustrative quotations from poetry, given that poetic literature was considered useful by the philosophically inclined for the purpose of teaching youths the kinds of behaviours they should avoid or pursue.⁷⁴ However, when faced with a topic that lent itself to scientific evidence, namely health (Chap. 11), the genre presented

⁶⁹ ... ὥς, εἴ γε κατὰ πολὺ τῆς τῶν προγόνων ἀρετῆς ἀπολειπόμεθα, λύπη μὲν ἂν εἴη κακείνοις, εἴ τις αὐτοῖς ἐστὶν αἴσθησις, αἰσχύνῃ δ’ ἡμῖν αὐτοῖς τοσῶδε μείζον, ὅσῳ καὶ τὸ γένος περιφανέστερον. *Protr.*, B. 93.16–94.1 = K. 1.12.11–14.

⁷⁰ Καὶ διὰ τοῦτ’ ἂν ἐγῶγε φαίην ἄσκησιν οὐχ ὑγείας, ἀλλὰ νόσου μᾶλλον εἶναι τὸ ἐπιτήδευμα. *Protr.*, B. 108.12–14 = K. 1.29.9–11.

⁷¹ With the exception of Hippocrates, whom he quotes five times (*Protr.*, B. 104.14–18, 106.15–17, 106.17–18, 108.5–9, 108.14–16 = K. 1.25.5–8, 27.11–13, 27.13–15, 29.2–6, 29.11–13), Galen does not rely on medical citations. Instead, his citations come primarily from famous authors, such as Herodotus, Homer, Pindar, Sappho, Euripides and Sophocles. Homer (B. 93.13, 97.9, 97.13, 97.15, 97.17–18, 98.13–17, 107.10–13, 109.8 = K. 1.12.8, 16.17, 17.4, 17.5, 17.7–8, 18.7–11, 28.10–12, 30.11); Pindar (B. 85.10–11, 95.20, 95.22 = K. 1.2.16–17, 15.3, 15.5–6); Sappho (B. 97.1–2 = K. 1.16.10–11); Euripides (B. 93.8–9, 96.15–16, 103.8–16, 104.1–3, 104.6–9, 111.16–17, 112.2 = K. 1.12.3–4, 16.5–6, 23.16–24.7, 24.10–12, 24.15–25.1, 33.5–6, 33.8); Sophocles (B. 90.11–12 = K. 1.8.15–16). It should be said that Galen also cites or mentions the opinions of famous philosophical figures, such as Solon (B. 96.12–14 = K. 1.16.1–2), Aristippus (B. 90.11–12 = K. 1.8.15–16) and Diogenes the Cynic (B. 92.5–13, 99.16 = K. 1.10.14–11.3, 18.15–19.12). While these figures are somewhat atypical of Galen’s usual philosophical testimonies in his scientific writings, they were commonly used in anecdotes and maxims by orators because these were noteworthy statements commonly found in doxographical and historical texts. Hock and O’Neil 1986, 63–112, 302–41.

⁷² Lacy 1966; Sluiter 1995; Tieleman 1996, 219–248.

⁷³ *PHP*, K. 5.273. Singer 1992, 161–162; Sluiter 1995, 200–201.

⁷⁴ Sicking 1998.

Galen with a rhetorical dilemma: How may he maintain his professional identity while relying on the kinds of rhetorical proofs that the genre required?

Galen's solution is to use his opponent as a foil against any potential criticisms he may face for using such rhetorical proofs in *Protr.* After claiming that no philosopher or physician was in favour of athletics training, he remarks, 'I did not want to pass judgment completely on the basis of testimony (ὅλως μὲν οὖν ἐπὶ μάρτυρος) because that is the sort of thing associated with rhetoric rather than of a man who honours truth.'⁷⁵ He then points out that because his opponents 'fall back on the praise of the masses and the vain honours from these men', he 'was constrained by these men's arguments to make use of testimonies so that they may recognize that they do have some advantage on this point'⁷⁶ (Here, he switches to the third person plural to characterize the group.). In this way, Galen reveals himself to be capable of more scientific explanations, but he is constrained by the rhetorical nature of his opponents' arguments. Ultimately, as will be seen, this statement allows him to showcase his own rhetorical wit.

Nevertheless, he does make use of a somewhat 'scientific' argument. He cites 'Hippocrates' (*De alim.* 34.3–4) and provides his own cursory medical explanation as to why this citation's claim, namely that the 'athletic state is not natural, a healthy condition is better' (διάθεσις ἀθλητικὴ οὐ φύσει, ἕξις ὑγιεινὴ κρείσσων), is in fact true.⁷⁷ In this way, he communicates that his knowledge of health is derived from medicine. Furthermore, his scientific explanation is suitable for his ideal audience because he uses a well-recognized medical authority and because he does not descend into a complicated medical explanation. With that said, when one considers that *Protr.* is completely devoid of citations or references to Galen's other writings, it becomes strikingly clear that he has the ideal audience in mind when composing *Protr.* Such auto-citations and references were for the benefit of his circle of friends and students, and therefore, they would be out of place in a work which is clearly intended to be for a general audience of 'youths'.

V. Message

5.1 Structure

⁷⁵ "Ὀλως μὲν οὖν ἐπὶ μάρτυρος οὐκ ἐβουλόμην κρίνεσθαι· ῥητορικοῦ γὰρ τὸ τοιοῦτον μᾶλλον ἢ τιμῶντος ἀλήθειαν ἀνδρός·.... *Protr.*, B. 104.18–20 = K. 1.25.9–11.

⁷⁶ "... ὅμως δὲ ἐπεὶ δὲ τινες ἐπὶ τὸν τῶν πολλῶν ἔπαινον καταφεύγουσι καὶ τὴν παρὰ τούτων κενὴν δόξαν, ἀφέντες αὐτὸ τὸ ἐπιτήδευμα γυμνὸν τῶν ἕξωθεν σκοπεῖν, ἠναγκάσθην καὶ τούτοις προχειρίσασθαι τοὺς μάρτυρας, ἵνα, ὅτι μὴδ' ἐνταῦθα πλέον ἔχουσί τι, γινώσκωσιν. *Protr.*, B. 104.20–105.4 = K. 1.25.11–16.

⁷⁷ *Protr.*, B. 108–9 = K. 1.29–30.

Protr. does not reflect a stream of consciousness. Rather, it is a well-structured discourse in which changes in the subject matter are marked off and anticipated with a variety of different transitional statements. As pointed out earlier, *Protr.* has a discernible *peroratio*, which clearly harks back to the subject matter of the *exordium*. By demonstrating what would happen if one leaves his life to chance, the first part of *Protr.*'s arguments confirms the *exordium*'s claim that mankind should practice a τέχνη. As was noted, the second part is a refutation of this opponent's arguments. Thus, *Protr.* has some of the formal features one would expect of oratory in that it has discernible *exordium*, *confirmatio*, *refutatio* and *peroratio*. However, such a model does not explain why the subject matter of Galen's refutation in *Protr.* is only loosely connected with what is argued in the *exordium* and the *confirmatio*, and therefore, outside of the context of a philosophical protreptic, it would have been seen as an extremely odd digression.

As was suggested earlier, the overall structure of *Protr.* bears some resemblance to that of *Euthd.* Both texts have the speaker addressing a youth(s) while revealing why it is beneficial to pursue virtue through education. This is followed by a refutation of the proponents of a false form of education: in *Euthd.*, it is the two Sophists; in *Protr.*, it is the proponent of athletics training. In *Euthd.*, after Socrates finishes refuting the two Sophists, he returns to his dialogue with Cleinias. The aim of this second investigative dialogue (288b–307c) is to determine what τέχνη provides true knowledge. Likewise, at the end of *Protr.*, Galen turns back to his audience of youths to exhort them to take up an art and to prepare them for the upcoming arguments in which he will demonstrate that medicine is the best of the arts.

That said, it is doubtful whether *Protr.* was designed to remind the audience of *Euthd.* *Protr.* is in the form of a speech rather than a narrated dialogue, as is the case in *Euthd.*, and Galen's style of argumentation in *Protr.* is a far less analytical approach than the one taken by Socrates. Nevertheless, Galen has ultimately followed the Platonic structure of a philosophical protreptic.⁷⁸ He is using the confirmation/refutation model of exhortation as expressed by the Academic Philo of Larissa in the aforementioned quotation: 'one part demonstrates what a great profit virtue is, the other refutes those who are destroying and slandering virtue.'⁷⁹ This model provided a logical reason for the subject of Galen's *refutatio*. His refutation of his opponent's arguments in favour of athletics would have been understood as being tantamount

⁷⁸ A similar structure is discernible in the *Protrepticus* of Clement of Alexandria. Herrero de Jáuregui 2008, 14–15. As to the dialogical features of protreptic discourse, see Hartlich 1889, 270, 293; Fitzgerald and White 1983, 11–14; Jordan 1986.

⁷⁹ q.v., n. 21.

to refuting those who are ‘destroying and slandering virtue’ in that his opponent is destroying the true art of the human body by claiming that athletics can indeed produce health.

5.2 Theme

In the exordium, Galen presents a well-recognized philosophical theme.⁸⁰ He begins by suggesting that animals have some form of reason (λόγος), which is voiceless and internal (ἐνδιόθετον).⁸¹ What separates man from the other animals is that he alone displays knowledge (ἐπιστήμη), which is evident in his ability to ‘learn whichever art he wishes’ (ἢν ἂν ἐθελήσῃ τέχνην μανθάνει). He points out that most animals are altogether ἄτεχνα; some animals have an art, but, unlike men, they ‘acquire it by φύσις rather than by choosing arts’ (ταῦτα φύσει μᾶλλον ἢ προαιρέσει τεχνῶν εὐτύχηκεν). While Galen’s use of λόγος is somewhat curious, for the most part, he is articulating a commonly held opinion ‘among the philosophers and rhetoricians of the Roman empire that the sagacity of animals is due, not to reason (λόγος), but to a natural instinct (φύσις)’.⁸² In other words, animals do not have the kind of intelligence to acquire an art that has not already been engendered in the species by nature.

Galen goes on to say that man has a choice to learn either the kinds of manual skills displayed by animals, such as the weaving of spiders and the molding of bees, or man can chose intellectual arts, his so-called θεῖαι τέχναι, such as geometry, astronomy and medicine. In the latter category, Galen emphasizes the divine nature of medicine by reminding the audience that the art of medicine came from Asclepius and Apollo. He describes how man uses geometry and astronomy to examine the heavens and the earth, which is obviously beyond the realm of animals. He concludes that while some animals may have a form of reason (λόγος), man alone is logical (λογικός). He then appeals to his audience’s sense of *pathos* by stating, ‘Therefore, how is it not shameful to neglect the only part of us we share in common with gods in order to pursue something else all the while despising taking up an art and entrusting oneself to Fortune?’⁸³

By declaring philosophy to be ‘the greatest of the divine goods’ (τὸ μέγιστον τῶν θείων ἀγαθῶν),⁸⁴ Galen makes it quite clear in the *exordium* that he is not arguing that the practice of the arts is on par with the study of philosophy. His point is simply that the

⁸⁰ *Protr.*, B. 84–85 = K. 1.1–3.

⁸¹ As to his use of the term ἐνδιόθετος λόγος, see Singer 1997a, 405–406, n. 35. cf. Boudon 2002, 120, n. 2.

⁸² Dickerman 1911, 123, 123–130. cf. Newmyer 2006, 10–47.

⁸³ Πῶς οὖν οὐκ αἰσχρὸν, ὥς μόνω τῶν ἐν ἡμῖν κοινωνοῦμεν θεοῖς, τούτου μὲν ἀμελεῖν ἐσπευκέναι δὲ περὶ τι τῶν ἄλλων, τέχνης μὲν ἀναλήψεως καταφρονοῦντα, Τύχῃ δ’ ἐαυτὸν ἐπιτρέποντα; *Protr.*, B. 85.16–19 = K. 1.3.5–8.

⁸⁴ *Protr.*, B. 85.12 = K. 1.3.1–2.

acquisition of an art, especially a rational art, requires the ability to think and reason, which is the ‘only part of us we share in common with the gods’ and is what separates us from the animals.⁸⁵ This is the theme that holds the subsequent arguments together in *Protr.* While it is quite clear, in this introduction, that Galen is echoing many of the ideas concerning rational thought expressed by Plato and subsequent philosophers,⁸⁶ he places much greater emphasis on the moral and intellectual value of the arts than previous philosophical authors had. Generally, in philosophical protreptics, the topic of the arts was used to illustrate why wisdom was beneficial to understanding and successfully utilizing an art. Thus, Galen has put his own spin on this recognized philosophical theme.

The aforementioned theme holds together his subsequent arguments concerning the vagaries of Fortune and the pseudo-art of athletics. The connection between τύχη and rational thought had been previously established in philosophical writings. In Plutarch’s *Περὶ Τύχης*, Plutarch warns against the dangers of relying on the gifts of Fortune in an attempt to urge the audience to pursue activities that require intelligence (φρόνησις). For Plutarch and other philosophers, living by chance is tantamount to neglecting our ability to reason, which is god-given and the very thing that makes us superior to the animals. And, like Galen, Plutarch makes the practice of τέχναι the antithesis of τύχη because the arts require intelligence to produce their understood ends. Thus, when Galen brings up the figure of Τύχη, his audience would have picked up on this connection between rational thought and Fortune. This connection is carried over into Galen’s criticisms of athletics. By proving that athletics does not produce the goods that it claims to, Galen makes clear that athletics is not a τέχνη and, therefore, does not require intelligence to practice it. In other words, athletics has more in common with irrational beasts than it does with mankind. In *Protr.*, he often depicts the behaviour of athletes as being similar to that of animals in respect to their lack of self-control and intelligence. Unlike other contemporary authors, who viewed athletics as a τέχνη and useful to society and the individual, Galen is arguing that only medicine delivers what it promises in regard to the bodily art; and for that reason, the practice of medicine is an avenue in which one can truly use one’s god-given intelligence.

However, the thrust of his argument also extends into how medicine should be classified. From Plato onward, the classification of the arts was a philosophical endeavour which often found its way into protreptic discourse, as in the previously discussed passages in *Euthd.*⁸⁷ Because the arts were, as Plutarch expresses it, indicative forms of intelligence

⁸⁵ cf. Plutarch, (*Περὶ Τύχης*) *Moralia*, 98e.

⁸⁶ Plutarch, (*Περὶ Τύχης*) *Moralia*, 97c–98f; Iambl. (*Arist.), *Protr.*, 9.49.3–51.6. Boudon 2002, 120, n. 3.

⁸⁷ Tatarkiewicz 1963.

(φρονήσεις) and the well-recognized ways of men (πράγματα θνητῶν),⁸⁸ those arts that were perceived as being more cerebral were naturally considered the most appropriate for the philosophically inclined. Galen's aim in *Protr.* is to firmly seat medicine among the most respected τέχνηαι of the time.⁸⁹ This aim is actualized in the way in which he lists medicine with the arts commonly associated with the ἐγκύκλιος παιδεία.⁹⁰ It is also observed in the way he classifies medicine among the rational (λογικαί) and revered (σεμναί) arts, which stand in stark contrast to the manual (χειρωνακτικαί) and base (βάνανυσαι) arts that depend on the body more than the mind.⁹¹ Furthermore, because intelligence and wisdom are what man shares with the divine, Galen classifies medicine as one of the θεῖαι τέχνηαι, with physicians, as well as philosophers, being among a group of men who are the closest followers of the god Hermes.⁹² Using this image, he suggests that medicine, like philosophy, brings man closer to obtaining happiness (εὐδαιμονία) and success (εὐτυχία).⁹³

5.3 Stylistic features

As was noted, stylistically, *Protr.* is quite different from any of Galen's other works. It is clearly designed to appeal to a general audience in a manner reminiscent of epideictic oration. This is apparent when one observes the *variatio* of rhetorical tropes and literary devices Galen uses to make his arguments both entertaining and persuasive. Aside from the numerous metaphors, similes and rhetorical questions that are quite prevalent in this work, it is his use of literary devices, such as comparison (σύγκρισις), commonplace (τόπος), myth (μῦθος), anecdote (χρεία) and maxim (γνώμη), in a manner similar to what was taught in the *progymnasmata* that makes this text unmistakably rhetorical.⁹⁴ Given that I have already touched upon Galen's use of χρεῖαι and γνώμαι in my discussion of Galen's literary witnesses, in the following I will present examples of his use of σύγκρισις, τόπος and μῦθος, as well as the witticisms that also give *Protr.* its oratorical feel.

A σύγκρισις, according to the *progymnasmata* ascribed to Aelius Theon (c. 1st century AD), is a 'discourse that sets the better and the worse side by side' (σύγκρισις λόγος τὸ βέλτιον ἢ τὸ χεῖρον παριστάς) to create a forceful effect.⁹⁵ It

⁸⁸ Plutarch, (Περὶ Τύχης) *Moralia*, 99a–c.

⁸⁹ Ieraci Bio 1991; Boudon 2002, 24–35.

⁹⁰ *Protr.*, B. 84–85, 88–89, 117 = K. 1.2–3, 6–7, 39.

⁹¹ *Protr.*, B. 117 = K. 39.

⁹² *Protr.*, B. 88–89 = K. 6–7.

⁹³ Plutarch, (Περὶ Τύχης) *Moralia*, 99e–f.

⁹⁴ Heath has argued that Theon's *progymnasmata* was composed well after the 1st century AD. Heath 2003. Nevertheless, the general position is that this text was composed during the 1st century AD and that it reflects the kinds of topics which were associated with *progymnasmata* of the 2nd century AD. Corbett 1990, 484–488; Cichocka 1992, 991–994; Kennedy 2003, 1–3.

⁹⁵ Theon, *Prog.*, 112.20–23; Kennedy 2003, 52.

involves comparing the appearance, character and actions of two people or things which are related in some way, such as two gods.⁹⁶ In Theon's discussion of how to use this device, he points out that, when comparing inanimate things, one should look to analogies, such as the maker of the things being discussed: for example, health is the daughter of Apollo. Having done this, one should point out the advantages and disadvantages that are a result of these things. In Chapters 2–5 of *Protr.*, Galen uses an extended σύγκρισις which illustrates how studying a τέχνη is superior to leaving one's life to τύχη. As was already mentioned, he compares these two inanimate things by using the figures of Hermes, the god of the arts, and Fortune, the goddess of chance. In Chapters 2 and 3, Galen compares their appearance and character. He describes how painters and sculptors depict the wretchedness (μοχθηρία) of Fortune by making her a blind (τυφλή) female standing on a very unstable base—a sphere. This image is contrasted with that of Hermes, the so-called master of reason (λόγου δεσπότης) and the practitioner of all art (ἐργάτης τέχνης ἀπάσης), whom he describes as being portrayed in sculpture as a young man with a keen (δριμύ) gaze standing on the most stable of platforms—a cube. As to their character, he contrasts the folly (ἄνοια) of the mindless (ἄνους) and unstable (ἄστατος) Fortune with the providence (προνοία) and the virtuous soul (ἡ τῆς ψυχῆς ἀρετή) of Hermes. He describes how Fortune carelessly leads her mindless followers (ἄμαθεις ἐπόμενοι) over cliffs into the sea where they are all completely destroyed (συναπόλλυνται). This dreadful image is compared with that of Hermes standing among his brilliant worshippers (φαιδροί θιασῶται) where they are always benefiting (ἀπολαύονται) from his foresight.

Galen's σύγκρισις is built upon a well-recognized theme in protreptic discourse, namely the personified deity and his or her followers. Thus, in Chapters 4 and 5, Galen compares the followers of these gods. He contrasts the image of Fortune's followers, who are lazy (ἄργοί) and ignorant of arts (τεχνῶν ἄμαθεις), with that of Hermes' chorus of well-mannered men (κόσμιοι), who are practitioners of arts (τεχνῶν ἐργάται). He tells his reader to observe how Croesus of Lydia, Polycrates of Samos, Cyrus, Priam and Dionysius the Tyrant of Syracuse flourished for a time, but later, they all had reversals in fortune, citing the execution of Croesus, Polycrates and Cyrus and the overthrow and exile of Priam and Dionysius.⁹⁷ Galen also contrasts the infamous followers of Fortune with a list of illustrious names, Socrates, Homer, Hippocrates and Plato, as being deputies (ὑπαρχαί) and attendants (ὑπηρέται) to Hermes.

⁹⁶ Theon, *Prog.*, 112–115; Kennedy 2003, 52–55.

⁹⁷ These are figures quite commonly associated with reversals in fortune. For example, at the beginning of the 64th discourse, Dio Chrysostom (AD c. 40/50–after 110) lists Croesus, Polycrates and Cyrus as people who blame Fortune for her capricious nature.

To strengthen his appeal, Galen contrasts the types of men who follow these deities. In the case of Hermes, they are geometers (γεωμέτραι), mathematicians (ἀριθμητικοί), philosophers (φιλόσοφοι), doctors (ἰατροί), astronomers (ἀστρονόμοι) and grammarians (γραμματικοί).⁹⁸ This list stands in stark contrast to the followers of Fortune, who are said to be demagogues (δημαγωγοί), courtesans (ἐταῖραι), catamites (πόρνοι), betrayers of friends (προδόται φίλων), murderers (φονεῖς), graverobbers (τυμβωρύχοι), thieves (ἄρπαγες) and even pillagers of the gods' temples (ἱερὰ συλήσαντες).⁹⁹ Here, Galen invokes some of the negative stereotypes associated with Fortune to reveal what will happen to those who neglect taking up an art.¹⁰⁰

From these contrasting images, it would have been obvious to the members of his audience whom they should follow, and it would be equally evident that Galen has employed a carefully constructed σύγκρισις. In this way, Galen appeals to their emotions by amplifying the gravity of their decisions, much as the comparisons between the personified Craft (Τέχνη) and Culture (Παιδεία) in Lucian's *Somn.* or the personified *Pseudopaideia* and *Paideia* (12–20) in the *Tabula of Cebes* (c. 1st century AD) were designed to do. Ultimately, Galen's approach to the audience in this σύγκρισις is stylistically similar to the *Tabula of Cebes* and other moralistic works in which the author provides a vivid allegory of the ramifications of their audiences' potential choices.

Theon describes a τόπος in rhetoric as descriptive language that amplifies a fault or brave deed by creating a vivid image (διατύπωσις) of the action.¹⁰¹ It is called a τόπος because it provides a starting point for an attack on those who do not admit that they are in error. However, it is an attack not on an individual but on a recognizable type, such as licentious men or a traitorous general. In *Protr.*, one of Galen's rhetorical strategies is to undermine the value of athletics as an art by using vivid language to paint an image of the athlete as being bestial or a dilapidated heap of flesh. To demonstrate that athletes represent the antithesis of health, he likens the parts of their bodies to parts of a city's walls that have been thoroughly shaken by siege engines and are now ready to fall apart with the slightest perturbation.¹⁰² He then extends this simile into his description of the appearance of these athletes' bodies. He describes how their 'eyes are dug-out around' (ὀφθαλμοὶ

⁹⁸ *Protr.*, B. 88–89 = K. 1.7.

⁹⁹ *Protr.*, B. 88 = K. 1.6.

¹⁰⁰ The *Tabula of Cebes* demonstrates how such a list would have been considered logical to Galen's readers. In the allegory of the *Tabula of Cebes*, the followers of Fortune are compelled 'to defraud others' (ἀποστερεῖν), 'to rob temples' (ἱεροσυλεῖν), 'to lie under oath' (ἐπιορκεῖν), 'to be traitors' (προδιδόναι) and 'to pillage' (ληΐζεσθαι) because they have squandered on Luxury all that Fortune has given them, and therefore, they resort to heinous acts to obtain the pleasures of Luxury. *Tabula of Cebes*, Fitzgerald and White 1983, 74–77 = 9.1–39.

¹⁰¹ Theon, *Prog.*, 106–109; Kennedy 2003, 42–45.

¹⁰² *Protr.*, B. 109 = K. 1.30–31.

περιορωρυγμένοι) and their ‘teeth have been shaken so often’ (οἱ ὀδόντες διασεσεισμένοι πολλάκις) that they fall out easily, and he notes how ‘the parts of their joints which have been twisted’ (τὰ λυγισθέντα τῶν ἄρθρων) have made them too weak for daily life and how ‘fracture’ (ῥήγμα) and ‘rupture’ (σπάσμα) easily occur in these men. Using the participles περιορωρυγμένοι, διασεσεισμένοι and λυγισθέντα, it is quite clear that Galen plays upon the image of a city under siege to depict what years of athletics training can do to the body. While ῥήγμα and σπάσμα were commonly used in medical texts for bone fractures and ruptures of muscles,¹⁰³ they also fit into Galen’s image of the deleterious effects of τειχομαχία on a city’s walls. Therefore, rather than using decidedly medical language to describe athletes’ physical appearance, Galen has chosen to vividly portray what athletic training has done to their bodies.

According to Theon, when one presents a μῦθος, it is incumbent upon the writer/speaker to add meaning to the myth.¹⁰⁴ He notes how the rhetorical use of a fable should have the following features: prooemion, a brief narrative of the myth, a modified citation of the myth, followed by a conclusion as to the myth’s meaning. This structure is likewise used in *Protr.* In Chapter 13, Galen introduces the myth by claiming that he is going to recount a μῦθος that will illustrate how athletics is worthless even in its own field of endeavour.¹⁰⁵ He then relates how, in this myth, the animals would be allowed by Zeus to compete in the Olympia against humans. Because of this, no man would be able to win a single crown because the animals would dominate all the events owing to their superior strength and speed: the horse would be best at long-distance races; the hare would win the sprints; the bull would win in boxing; and the ass would be victorious in fighting. He then quotes a key passage from the myth:

Then in a well informed account the ass will be noted
that, in παγκράτιον, he was victorious at that time over men.
The twenty-first Olympiad was the triumph
of Brayer.¹⁰⁶

¹⁰³ The two terms are often paired together in medical texts. Dioscorides, 1.2, 1.6, 1.28, 1.75, 2.80, 2.166, 2.173, 3.4, 3.6, 3.24, 3.74; Galen, *Caus. Mor.*, K. 7.40.1; *CAM*, K. 1.239; *Morb.Diff.*, K. 6.872; Hippocrates, *Aër.*, 4. cf. Plutarch, *De tuenda sanitate praecepta*, 130.d.2.

¹⁰⁴ Theon, *Prog.*, 72–78; Kennedy 2003, 23–28.

¹⁰⁵ *Protr.*, B. 114–115 = K. 1.35–36.

¹⁰⁶ αὐτὰρ ἐν ἱστορίῃ πολυπείρω γράφεται ὄνος,
ὅτι
παγκράτιον νίκησέ ποτ’ ἄνδρας,
εἰκοστή δὲ καὶ πρώτη ὀλυμπιάς ἦν, ὅτ’ ἐνίκα
Ὀγκηστής.

Protr., B. 115.6–10 = K. 1.36.13–15. The author of this myth is unknown.

This quote is to humorously point out that even an ass can beat a man when it comes to feats of athletic prowess. Galen then provides a conclusion by declaring that ‘the myth shows’ (ὁ μύθος ἐπιδείκνυσιν) that ‘athletic power is not one of the human accomplishments’.¹⁰⁷ Thus, Galen’s retelling of this myth is consistent with the rhetorical manner in which myths were presented in rhetorical theory and practice.

Through his use of witticisms, Galen demonstrates that *Protr.* is also designed to be an entertaining display of his erudition. For example, in Chapter 10, he quotes a passage from the *Iliad* (24.677–9):

Now the others, the gods and drivers of chariots
Were slumbering all night being subdued by soft sleep,
But sleep did not take hold of the wretched athletes.¹⁰⁸

In this passage, he substitutes ‘ἀθλητὰς κακοδαίμονας’ for ‘Ἑρμείαν ἐριούνιον’, as it reads in the *Iliad*, to make his point that athletes are unable to sleep because of their unhealthy lifestyle.¹⁰⁹ Galen is not attempting to trick his audience for they undoubtedly would be aware of how the passage read. The intended effect is for his audience to recognize his alteration as being witty because he has changed the verse’s discussion of Hermes to a reading that is critical of the athletic lifestyle, all without losing the meter.

Another example of Galen’s attempt at being clever appears in Chapter 10.¹¹⁰ To foreshadow what he is about to do to his opponent’s rhetorical arguments for athletics, Galen uses the account of the famous courtesan Phryne, who exposed the false beauty of other women by tricking them into removing their makeup.¹¹¹ Galen connects this story to his following arguments by declaring:

Therefore, just as true beauty can be accurately inspected only according to itself, when it is stripped naked of all external adornments (προσιόντων ἀπάντων γυμνωθέν), likewise it is fitting to examine the vocation of athletics by itself, whether it may appear to have a usefulness either to the state as a whole or to the individual among those who practice it.¹¹²

¹⁰⁷ Πάνυ χαριέντως οὗτος ὁ μύθος ἐπιδείκνυσιν τὴν ἀθλητικὴν ἰσχὺν οὐ τῶν ἀνθρωπίνων οὔσαν ἀσκημάτων.... *Protr.*, B. 115.11–13 = 1.37.1–2.

¹⁰⁸ ἄλλοι μὲν ῥα θεοὶ τε καὶ ἄνδρες ἱπποκορυσταὶ
εὖδον παννύχιοι μαλακῶ δεδημένοι ὕπνῳ·
ἀλλ’ οὐκ ἀθλητὰς κακοδαίμονας ὕπνος ἔμαρπτεν.

Protr., B. 107.10–12 = K. 1.28.10–12.

¹⁰⁹ Boudon 2002, 138, n. 2.

¹¹⁰ *Protr.*, B. 105 = K. 1.26.

¹¹¹ Boudon 2002, 137–138, n. 2.

¹¹² ... ὥσπερ οὖν τὸ ἀληθινὸν κάλλος ἀκριβῶς ἐξετάζεται μόνον αὐτὸ καθ’ ἑαυτὸ τῶν ἔξωθεν αὐτῶν προσιόντων ἀπάντων γυμνωθέν, οὕτω καὶ τὴν ἀθλητικὴν ἐπιτήδευσιν ἐξετάζεσθαι προσήκει μόνην, εἰ

The audience would naturally recognize that he is alluding to athletics training with his use of γυμνωθέν. Here, Galen again plays with words to contrast the naked body of evidence his logical arguments will reveal concerning the practices of athletes, whose beauty is covered by their deceptive, rhetorical makeup.¹¹³ In addition to these types of witticisms, Galen also uses the kinds of figures of speech that one would expect of epideictic rhetoric.¹¹⁴ For example, he uses the following παρονομασία (pun) to reveal that he had the oratorical ability to entertain with his words: ‘As for bodily health, it is clear that no other group is more miserable (ἀθλιώτερον) than athletes (τῶν ἀθλητῶν).’¹¹⁵

VI. Conclusion

The structure and subject matter of *Protr.* is reminiscent of the protreptic arguments of the Socratic figure, one who extols the virtues of a proper philosophical education to a youth while refuting those who propose a similar, but false, approach. Nevertheless, it is quite clear that Galen has made a conscious effort to include the kinds of rhetorical devices and clever wordplays that epideictic orators used to display their erudition. But why? How is this stylistic feature relevant to what he is trying to accomplish in *Protr.*?

The answer is threefold. First, as was noted earlier, philosophically inclined speakers of the 1st and 2nd century AD, such as Epictetus, were not averse to using some of the rhetorical devices that public orators employed in their speeches. And, this would be especially so when it came to protreptic discourse because this type of speech was often designed to appeal to the audience’s sense of *pathos*. Secondly, this style was appropriate for an ideal audience of youths of the upper classes. Such an audience would have been quite familiar with the kinds of rhetorical devices found in the *progymnasmata* and declamations. Finally, because one of Galen’s aims was to demonstrate how medicine was truly one of the arts befitting the ἐγκύκλιος παιδεία and because the stylistic features of declamations were perceived as signs of παιδεία, Galen has displayed that, when the circumstances called for it, a physician was just as capable of erudite speech as a public orator.

τι φαίνοιτο ἔχειν χρησίμον ἢ κοινῇ ταῖς πόλεσιν ἢ ἰδίᾳ τοῖς μεταχειριζομένοις αὐτήν. *Protr.*, B. 105.17–22 = K. 1.26.11–16.

¹¹³ König 2005, 297.

¹¹⁴ Alexander Rhetor (2nd century AD), *De figuris* (Περὶ παρονομασίας), 36.13–36.25.

¹¹⁵ Σωματικῆς μὲν οὖν ὑγιείας ἕνεκα φανερόν ὥς οὐδεν ἄλλο γένος ἀθλιώτερόν ἐστι τῶν ἀθλητῶν... *Protr.*, B. 110.1–2 = K. 1.31.8–9.

Investigating a Medical Problem:

Θέσεις and *Thrasybulus sive utrum medicinae sit an gymnasticae hygiene*

I. Introduction

In the epistolary proem to *Thrasybulus sive utrum medicinae sit an gymnasticae hygiene* (*Thras.*),¹ Galen describes *Thras.* as being notes (ὑπομνήματα) that reflect his answer to the question (πρόβλημα) posed by Thrasybulus: ‘Whether that which is called healthiness (ὑγιεινόν) belongs to gymnastics (γυμναστικῆς) or medicine (ἰατρικῆς)?’.² He describes what he is doing in this work as an ‘inquiry’ (ζήτησις), and likewise, the subject matter of this work is often identified as ‘what is being sought’ (τὸ ζητούμενον).³ Thus, he emphasizes the process of searching for an answer rather than recounting what has already been proven.

Through his prefatory remarks, Galen indicates that there were two constraints on this scientific inquiry. First, it was conducted extemporaneously through a series of questions and answers, i.e. dialectic.⁴ Although Thrasybulus posed the question, he is described as having been reluctant to respond to Galen’s subsequent questions, and therefore, Galen had to turn to ‘one of the philosophers trained in logical theory’ (τῶν τις γεγυμνασμένων ἐν λογικῇ θεωρίᾳ φιλοσόφων) who happened to be present. With this philosopher evidently playing the role of interlocutor, Galen claims that ‘the *problema* was easily brought to a conclusion’ (ῥαδίως διεπεράνθη τὸ πρόβλημα).⁵ The second constraint on Galen’s inquiry is self-imposed. Galen claims that the arguments used in this inquiry are informed by the same logical methods which he expressed in his *magnum opus* on logical proofs, *On Demonstration*.⁶ Thus, he asserts that in this work one will observe his employment (χρῆσις)

¹ The Greek text used for *Thras.* comes from Helmreich 1893, 33–100 = K. 5.806–898., which will appear in this chapter as H. I have greatly benefited from Singer’s translation in Singer 1997a, 53–99. The date of composition of *Thras.* appears to be some time before the composition of *San.Tu.* (AD c. 175) as this is the earliest text which makes mention of *Thras.* *San.Tu.*, K. 6.13.1, 6.136.7, 6.143.13. Bardong 1942, 636; Singer 1997a, li.

² πότερον ἰατρικῆς ἢ γυμναστικῆς ἐστὶ τὸ καλούμενον ὑγιεινόν. *Thras.*, H. 33.27–34.1 = K. 5.807.8–9. Galen’s use of the feminine signifies that medicine and gymnastics are arts, and his use of the neuter signifies that healthiness is a division or part (μέριον) of an art.

³ *Thras.*, (ζήτησις) H. 36.26, 41.1, 41.2, 75.14 = K. 5.811.15, 817.7, 817.11, 865.11, (τὸ ζητούμενον) H. 33.8–9, 34.21, 35.14, 36.14, 36.17, 36.21, 41.18 = K. 5.807.1, 808.13, 809.13, 811.3, 811.6, 811.10, 813.3.

⁴ Although the terms ‘dialectic’ and ‘dialectical’ carry a variety of meanings in antiquity as in today, when I use the term ‘dialectic’ in this chapter, I am signifying a formal system of reasoning in which a theoretical proposition or question is put forward and subsequently investigated through a series of questions and answers. cf. Smith 1994, 145. When I use the term ‘scientific inquiry’, I am speaking to the process of arriving at knowledge of a subject matter via a variety of ‘logical’ and/or ‘empirical’ methods.

⁵ *Thras.*, H. 35.4–11 = K. 5.809.3–9.

⁶ ...ἐν τοῖς περὶ ἀποδείξεως. *Thras.*, H. 33.10–15 = K. 5.807.2–7. cf. H. 37.22–26 = K. 5.812.14–813.3. Galen appears to be referring to his magnum opus on logical proofs, *De demonstrationibus* (*Dem.*). As to *Dem.*’s

of these methods.⁷ Rather than examining the formal logic used in *Thras.*, my analysis is concerned with how Galen conveys the process of scientific inquiry and how he uses this discourse to establish his identity as a physician.

The structure of *Thras.* is as follows: Galen begins with an extended epistolary proem (H. 33.1–36.7 = K. 5.806.4–810.13) in which he states the *problema*, contextualizes the nature of his inquiry and explains his rationale for writing *Thras.*⁸ His actual inquiry into this problem has three major divisions. The first part (H. 36.8–44.17 = K. 5.810.14–821.17) is a survey of the possible starting points (ἀρχαί) for answering the *problema*. The second division investigates the art of the body (H. 44.18–76.17 = K. 5.821.18–867.2). The third division makes inquiries into the definitions and roles of medicine and gymnastics in the art of the body (H. 76.18–98.4 = K. 5.867.3–896.3).

Each of these major divisions is broken down further into subordinate problems/topics. The first major division examines whether the definitions (ὀρίσμοί), aims (τέλη) or essence (οὐσίαι) of medicine and gymnastics offer reasonable starting points for this inquiry. The second major division is divided into two distinct subordinate topics of inquiry: 1) the oneness of the art of the body (H. 44.18–71.23 = K. 5.810.18–860.3) and 2) the parts of the art of the body (H. 71.24–76.17 = K. 5.860.4–867.2). Both of these subordinate inquiries are further subdivided into related questions. The inquiry into the oneness of the art of the body is further broken down into questions concerning the aim (τέλος), product (ἀγαθόν), example (παράδειγμα), activities (ἐνέργειαι), materials (ὕλαι) and theories (θεωρήματα) of this art. The investigation into the parts of the art of the body is organized into a series of questions concerning similarity and differences at various levels of classification.

As for the third major division in his inquiry, it involves a discussion of the common definitions and roles of ἰατρική and γυμναστική in the art of the body. Like the other major divisions, it is subdivided into a series of related questions/topics of inquiry. These subordinate questions ultimately contribute to Galen's demonstration that the art of gymnastics (γυμναστική) is the teaching of all kinds of healthy exercise rather than strictly dealing with exercises performed in a *gymnasion*, and furthermore, the medical practitioners are the proper overseers of those who practice this art of gymnastics. It is important to bear in mind that throughout the three major divisions of his inquiry, Galen often launches into

fragmenta and *testimonia*, see von Müller 1895; Rescher 1967, Appendix B; Moraux 1984, 685–808. A selection of scholarship on Galen's approach to logic and its role in medicine can be found in Barnes 1991; 1993a; 1993b; Hankinson 1991; 1992; von Karlheinz Hülser 1992; Tieleman 1995; 1996; Morison 2008.

⁷ cf. *Ord.Lib.Prop.* Boudon-Millot 2007a, 95.

⁸ An analytical outline of *Thras.* can be found in Appendix B.

polemics against athletics trainers (οἱ τοὺς ἀθλητὰς γυμνάζοντες). At these points, he argues that these men do not teach the healthy kinds of exercises associated with γυμναστική.

Galen brings *Thras.* to a suitable conclusion (H. 98.5–100.9 = K. 5.896.4–898.17) in that it ultimately answers Thrasybulus' question. He points out that the true practitioner of the art of the body is often called an ἰατρός because the whole art of the body was termed the ἰατρικὴ τέχνη by extension of one of its major parts—the medical/therapeutic (ἰατρικόν/θεραπευτικόν) part. He identifies the other major part of the art of the body as the preservative/healthiness (φυλακτικόν/ὑγιεινόν) part. Based on his division of the parts of the art of the body, γυμναστική is one of the small component skills under the preservative/healthiness (φυλακτικόν/ὑγιεινόν) part. Therefore, he concludes true γυμναστική should be recognized as a part of ὑγιεινόν rather than vice versa.

II. Genre

2.1 The πρόβλημα and the decorum of extemporaneous speech

The terms ζήτημα and πρόβλημα were often used interchangeably to signify a question or subject for discussion.⁹ Through its connection with the verb προβάλλειν, a πρόβλημα had the connotation of a question or problem that was 'posed' or 'thrown forward' for discussion. However, a *problema* was not necessarily associated with extemporaneous speech. For example, while reading a text or in thought, one could pose a *problema* to oneself for the purpose of internal deliberation and personal investigation.¹⁰ And, a written response to another's *problema* obviously did not require extemporaneous speech. Furthermore, a *problema* need not even be posed by a contemporary. It was quite common in philosophical and medical works for the author to address a longstanding theoretical *problema* in different types of prose.¹¹ Nevertheless, by his repeated use of the verb προβάλλειν and its cognates in the preface to *Thras.*, Galen emphasizes the extemporaneous nature of Thrasybulus' question.¹² And, because Galen claims to have written nothing other (οὐκ ἄλλα) than what he had said on the spot (παράχρημα), he is clearly emphasizing that this text reflects his oral extemporaneous response to the question.

⁹ Harrison 2000, 196.

¹⁰ *Lib.Prop.*, Boudon-Millot 2007a, 142–143 = K. 19.19. Arist., *Top.*, 1.2.

¹¹ Mansfeld 1990; 1992.

¹² *Thras.*, H. 33.2, 33.16, 34.12, 34.15, 34.17, 34.21, 35.1, 35.3, 35.5, 35.11, 35.17, 35.24, 36.1, 36.6 = K. 5.806.2, 807.9, 808.3, 808.6, 808.7, 808.11, 808.18, 809.2, 809.3, 809.9, 809.15, 810.4, 810.8, 810.12.

It is not uncommon for Galen to use such ‘real-life’ circumstances for rhetorical purposes.¹³ In *Lib.Prop.* and elsewhere, Galen depicts himself being involved in agonistic public demonstrations in which anatomical and medical *problemata* were posed to him.¹⁴ However, in *Thras.*, Galen has entered into a type of philosophical discourse which has its own unique and well-recognized decorum. In his *Topica*, Aristotle provides an account of the art of dialectic. In Book 8, he discusses a number of highly formalized procedures for conducting a dialectical argument presumably for philosophical training in the Academy, the so-called gymnastic dialectic.¹⁵ As is well known, this gymnastic dialectic involved two participants, the answerer and the questioner. The answerer would assert a proposition (θέσις), and the questioner would then attempt to secure a concession from the answerer by asking a series of questions to which the answerer was to reply either ‘yes’ or ‘no’, or in certain circumstances, the answerer could object by posing a counter-question. The aim of this type of dialectical exercise was to refine one’s ability to conduct a persuasive logical argument.

Aside from training in philosophical argumentation, Aristotle reveals another use for dialectical discourse, namely the art of testing (πειραστική), which was much more relevant to Galen’s aims in *Thras.*¹⁶ Here, the function of dialectic is to refute the claims of those who say they have some form of knowledge by proving that their beliefs lead to a contradiction. It is this use of dialectic that one finds in the Platonic dialogues, and it is this use of dialectic that was highly praised by the philosophically inclined thinkers of the 2nd century AD.¹⁷ Therefore, Galen’s examination of Thrasybulus’ question can be seen as a test of the athletic trainers’ claims about their knowledge of health.

In *Thras.*, Galen reveals that he is operating within the decorum of dialectical inquiry. He recalls how Thrasybulus had set up an erroneous starting point for their inquiry, which Galen claims would not lead to what they seek. With such statements, Galen reveals that poor premisses lead to fallacious conclusions, which was a fundamental principle expressed in theoretical discussions of dialectical inquiry from Aristotle onward.¹⁸ Likewise, his choice of

¹³ von Staden 1995a; 1997. Mattern’s work on the rhetorical nature of Galen’s patient-care narratives offers another interesting aspect to his use of ‘real-life’ events for the purpose of displaying his erudition. Mattern 2008.

¹⁴ *Lib.Prop.*, K. 19.13–15, 20–22. A far less agonistic picture of the role of *problemata* in oral discourse can be found in a section of Plutarch’s *De recta ratione audiendi* entitled τὸ περὶ προβλημάτων παράγγελμα. *Moralia*, 42f–44b. Here, Plutarch provides a series of rules for posing a problem to the speaker. These rules reflect a dialectical ideal in which an ideal listener is a participant in the discourse (κοινωνὸς τοῦ λόγου) as well as a fellow worker with the speaker (συνεργὸς τοῦ λέγοντος). *Moralia*, 45e. cf. Arrian, *Epict.*, 2.1.35–44, 2.20.32–37.

¹⁵ Ryle 1968; Smith 1993.

¹⁶ Arist., *SE*, 169b.25–29.

¹⁷ Arrian, *Epict.*, 1.7.

¹⁸ cf. Arist., *Top.*, 8.12.

interlocutors reveals his knowledge of the rules of dialectic. At the end of Book 8 of the *Topica*, Aristotle advises against using dialectic with the common man because to choose someone who is not skilled in logic would jeopardize one's chance of coming to the appropriate conclusion. While it is quite clear that Galen's second choice—the philosopher skilled in logical theory—was an appropriate interlocutor, one might raise issue with Thrasybulus being a suitable interlocutor. However, Thrasybulus' reluctance to answer Galen's questions is also a part of this kind of discourse.

When Galen tries to begin the inquiry by asking Thrasybulus to define medicine, gymnastics and healthiness, Thrasybulus remains silent (ἀποσιωπᾶν) on the grounds that Galen's inquiry should cover all aspects of the question. By simply not answering Galen's question, he avoided continuing with an inquiry that was not to his liking. If he were to answer Galen's question, Thrasybulus would have been obliged to continue the process of inquiry. It is important to bear in mind that Galen's apparent need to have an interlocutor not only illustrates the formal constraints of his inquiry but also its epistemological merits. The rhetorical value of an interlocutor is that the arguments put forward by the author appear to have been tested. In other words, it suggests that if anyone trained in logic used the same premisses and methods, he would logically come to the same conclusion as Galen.

Galen's portrayal of himself successfully managing a dialectical inquiry plays a significant role in his rhetorical strategy of demonstrating the intellectual-cultural superiority of physicians over athletics trainers. This becomes quite evident when Galen describes another life event at a strategic place in *Thras*. In Chapter 46, immediately before his conclusion, Galen recounts how he was once asked by a group of physicians and philosophers to respond to the criticisms an athletic trainer had made in respect to Hippocrates' views on massage. Galen claims that after he gave a full account (ἅπαντα διελθεῖν τὸν λόγον) of Hippocrates' position on massage, the same self-taught athletics trainer (αὐτοδίδακτος γυμναστής) led out a young boy and demanded Galen either demonstrate how to massage (τρίβειν) and gymnastically train (γυμνάζειν) this youth or be quiet (σιωπᾶν). Galen goes on to say that this same wretched (κακοδαίμων) trainer 'screamed away and especially because he was not quiet, it was impossible to listen and learn from our discussion, but we in a leisurely manner (κατὰ σχολήν) dialectically reasoned (διελέχθημεν) with those who were present'.¹⁹ Here, the illogical and vulgar manner in which the trainer addressed Galen and the audience is contrasted with Galen's more philosophical and learned approach. Here, Galen

¹⁹ οὗτος μὲν οὖν ἐκεκράγει τε καὶ ἄλλως οὐδὲ σιωπᾶν ἀκούειν ἐδύνατο καὶ μαθάνειν τὰ λεγόμενα, ἡμεῖς δὲ κατὰ σχολήν τοῖς παροῦσι διελέχθημεν, *Thras.*, H. 97.22–24 = K. 5.895.13–15.

portrays this trainer, and by extension all other trainers, as being unable to engage in civil philosophical discourse because of his lack of erudition.

2.2 The *θέσις* and the conventions of philosophical inquiry

The nature and development of *θέσεις* are very complicated topics. The following discussion serves as a summary for the purpose of contextualizing *Thras*. It is important to recognize that in the 2nd century AD there was plurality among Peripatetic, Stoic and Middle Platonist theoretical approaches to *θέσεις* and other forms of logical argumentation.

Scholars often begin their discussion of the *θέσις* with Aristotle's treatment of this subject in his *Topica*.²⁰ In the *Topica*, Aristotle states that a *θέσις* is a *πρόβλημα*, but not all *πρόβλήματα* are *θέσεις*.²¹ He goes on to say that 'Nowadays, nearly all τὰ διαλεκτικά προβλήματα are called *θέσεις*'.²² In the discussion surrounding these passages and elsewhere in the *Topica*, Aristotle claims that a dialectical *problema* is a speculative proposition (*θεωρήμα*) that is worthy of inquiry because of its intrinsic plausibility and/or because it was a point of controversy among authorities, particularly philosophers. From Aristotle's discussion of the *θέσις*, it becomes quite evident that the dialectical model was considered a method of philosophical argumentation in respect to disputable matters.

Although the Aristotelian notion of a *θέσις* in dialectical theory was, strictly speaking, a proposition fit for discussion, the act of refuting or confirming a theoretical proposition also came to be known as a *θέσις*. As is well known, a distinction was later drawn between a *θέσις* (*quaestio infinita*) and *ὑπόθεσις* (*quaestio finita*).²³ The thesis was associated with general or more theoretical questions, such as 'Is it right to marry?'. The hypothesis, on the other hand, was a question bound by circumstances (*περιστάσεις*) such as people or events. Hence, the aforementioned question could be made into a hypothesis simply by linking it to a person: 'Is it right for Cato to marry?'. Because a hypothesis took into consideration 'real-life' circumstances, it naturally lent itself to the arguing of legal questions or presenting one's position in public deliberation, and therefore, it was perceived as being proper to rhetoric. The thesis, on the other hand, was thought of as an inquiry for the sake of knowledge, and therefore, it was considered to be philosophical in nature.²⁴

²⁰ The reason for this is primarily due to the approach Thom took in his seminal work on the genre of the thesis in rhetoric and philosophy. Thom 1932. There is certainly a need for a more accessible and up-to-date treatise on this genre. More recent treatments of rhetorical and philosophical theses can be found in Mansfeld 1990; 1992; Schenkeveld 1997, 247–252; Wisse, Winterbottom and Fantham 2008, 38–57.

²¹ Arist., *Top.*, 104b.29–104b.30.

²² σχεδὸν δὲ νῦν πάντα τὰ διαλεκτικά προβλήματα θέσεις καλοῦνται. Arist., *Top.*, 104b.34–36, Ross 1970.

²³ Wisse, Winterbottom and Fantham 2008, 43.

²⁴ It is unclear to what extent the thesis initially came to be taught by rhetoricians. Wisse argues that, aside from Cicero, there is no compelling reason to believe that in Cicero's time, the thesis was extensively taught in

Let us turn to some of the conventions of *θέσεις* in rhetoric and philosophy in the 1st and 2nd century AD. In the four *progymnasmata* that span the period from the 1st to the 5th century AD, there is always a section dedicated to composing *θέσεις*. In the *progymnasmata* attributed to Theon, the author defines a *θέσις* as a logical inquiry (*ἐπίσκεψις λογική*) that does not admit *περιστάσεις*.²⁵ The author notes that there are *θεωρητικά* and *πρακτικά* *θέσεις*, which correspond to thesis and hypothesis respectively. He distinguishes theoretical theses from practical theses by noting how the former ‘make their inquiries only for the sake of theory and knowledge’ (*θεωρίας ἕνεκα καὶ γνώσεως μόνον ζητοῦνται*), while the latter were more political (*πολιτικώτεροι*) and rhetorical in character (*κατὰ τὸν ῥητορικὸν χαρακτήρα*).²⁶ While he is quite clear that thesis is proper to philosophy, he is nevertheless teaching this form of inquiry as an elementary form of prose.

Other than differences in the type of question and particular aim, the author of this *progymnasmata* points out that there is a difference in composition between a theoretical thesis and a practical thesis. Unlike a practical thesis, a theoretical thesis must have its order (*τάξις*) of composition adapted (*ἀρμόττειν*) to the particular *πρόβλημα*. He notes that one should pay attention as to where to place the ‘weaker and simpler dialectical proofs’ (*τὰ ἀπλούστερα καὶ κουφότερα τῶν ἐπιχειρημάτων*) and where the ‘more striking and weightier’ arguments (*τὰ πληκτικώτερα καὶ βαρύτερα*) should be presented. He then provides an example of how to address the question, ‘whether the gods exercise a providential care for the world’.²⁷ In his example, Theon gives a structured series of related propositions and questions which include the typical forms of philosophical proofs, such as craft analogies and the *δόξαι* of philosophers.²⁸ In addition to these philosophical methods, his treatment of this genre reveals that rhetorical forms of argumentation, such as amplifications (*αὐξήσεις*) and digressions (*παρεκβάσεις*) as well as appeals to the audience’s emotions, can be used when appropriate. Thus, in this light, Galen’s polemical remarks in *Thras.* were not totally foreign to the writing of a *θέσις*.

In respect to the way in which *θέσεις* were identified in philosophical works of the 1st and 2nd century AD, it is far more common to find the investigation of a theoretical question or a disputable matter in philosophy being indirectly referred to as a *πρόβλημα* or *ζήτημα* rather than a *θέσις*. Nevertheless, the way in which such questions were investigated reveals

rhetorical theory. Wisse, Winterbottom and Fantham 2008, 43. Nevertheless, by the time Galen was writing, it was evidently incorporated into the *progymnasmata*.

²⁵ Theon, *Prog.*, 120.13–15. I have benefited from Kennedy’s notes and translation found in Kennedy 2003, 55–61.

²⁶ Theon, *Prog.*, 121.3–14.

²⁷ Theon, *Prog.*, 126–128, trans. Kennedy 2003, 59–61.

²⁸ Barnes 1981; Irwin 1988; Smith 1994.

that there were recognizable conventions of philosophical inquiry. From Plutarch's treatment of the question of whether fire or water is more useful, to Plotinus' investigation into whether sensation and rational thought belong to only the soul or the soul using the body or a mixture of both, the philosophical treatment of such disputable matters was to examine them through 'the method of *in utramque partem*, of confirmation and refutation (κατασκευή, ἀνασκευή)'; that is to say, knowledge of a philosophical problem was arrived at by testing the possible answers by illustrating the pros and cons to a given position.²⁹ Therefore, what modern scholars have identified as θέσεις could occur in a wide variety of philosophical prose, such as dialogues (Dio Chrysostom), recorded speeches (Plotinus) and treatises (Plutarch or Philo of Alexandria).³⁰

Mansfeld has demonstrated that there was a close relationship between philosophical doxography and philosophical inquiry.³¹ He points out that '*placita* literature', such as Aëtius' doxographical work, often break a subject into a structured list of common philosophical problems. Within each problem, one can find a list of opinions (δόξαι) of philosophers and physicians on the question, which is often partitioned in such a way as to illustrate the major divisions of opinion, i.e. the διαίρεσις of the problem.³² He points out that these structured lists of problems and opinions echo Aristotle's remarks in the *Topica*, where Aristotle encourages the investigator to organize his subject into *problemata* and collect the opinions (δόξαι) held by the experts.³³ Mansfeld supports this by illustrating how the types of questions and potential solutions found in *placita* literature often occur in later theses and treatises of philosophers, physicians and rhetoricians. Therefore, it would seem that, in respect to theses, being aware of and addressing the different positions on a given *problema* were important components of inquiry.

The importance of δόξαι and the διαίρεσις of the problem in a philosophical inquiry can be observed in Galen's criticisms of Chrysippus' arguments. In *PHP*, Galen finds fault with Chrysippus' approach to the question 'whether affections supervene judgment?', which is a problem raised in the latter's treatise *Περὶ παθῶν*.³⁴ Galen claims that Chrysippus 'in his division of the problem' (ἐν τῇ διαίρεσει τοῦ προβλήματος), reveals that his treatment of the subject is incomplete. As Mansfeld points out, Galen's argument is that Chrysippus' division of the problem is lacking in two respects: first, it does not take into account Plato's *doxa*, and secondly, Chrysippus has failed to address the possibility that the soul may have

²⁹ Plut., *Mor.*, 955d–958e; Schenkeveld 1997, 247–249; Plotinus, *Enn.*, 1.1.

³⁰ Mansfeld 1990; 1992; Schenkeveld 1997, 247; Runia 1999.

³¹ Mansfeld 1990, 3193–3216.

³² Mansfeld 1990, 3092–3108, 3208–3212; 1992, 86–92.

³³ Mansfeld 1990, 3206–3207. cf. Runia 1999, 196–198.

³⁴ *PHP*, de Lacy 1978, 4.1.14–17.

three parts.³⁵ In the case of *Thras.*, as will be discussed later, Galen's division of the problem does not take into consideration the opinions of philosophers and physicians. Perhaps, the reason for this is that Thrasybulus' question was not a standard philosophical question that had well-recognized divisions of opinion. However, in *Thras.* Galen does examine other possible approaches to the problem.

Bearing in mind that not every thesis contains all of the following component parts, let us discuss some of the recurring features modern scholars often associate with theses. First, the inquiry typically begins with a statement of a theoretical proposition or a question which will be investigated. The next component of this genre is a survey of the potential answers to the stated problem. If this is a standard problem, the survey should involve a discussion of the different δόξαί of philosophers and physicians on the problem, which serves to illustrate the points of disagreement (διαφωνία) among these notable authorities. The author's survey of the problem may or may not include a discussion of other potential answers to the question. The next component of a thesis is the author's examination of the problem via the method of confirmation and refutation. This process may or may not come to a firm conclusion. However, in cases where the author offers no conclusion, often he reveals that he favours a particular position through the structure or tone of his inquiry. While the movement from one position to the next is clearly marked off with 'introductory phrases and connecting participles', θέσεις often display a 'looseness of thought' in that there is not always a 'logically coherent and consistent sequence of argument'.³⁶

What makes this genre distinctively philosophical are the kinds of questions that are asked of the subject.³⁷ By and large, such inquiries address three major categories of questions: existence (εἰ ἔστι), substance (τί ἔστι) and quality (ὅποιόν τί ἔστι).³⁸ Of course, there was latitude as to the phrasing of these questions. For example, in his Platonic evaluation of dialectic, Plotinus lists the following questions: How does each thing differ from other things (τί ἕκαστον ἄλλων διαφέρει)? What are its commonalities (τίς ἡ κοινότης)? Among what class of things and where in this class is each thing situated (ἐν οἷς ἔστι καὶ ποῦ τούτων ἕκαστον)?³⁹

³⁵ Mansfeld 1992, 88–89.

³⁶ Schenkeveld 1997, 249.

³⁷ Mansfeld 1990, 3193–3208; Runia 1999, 196–206.

³⁸ Mansfeld 1990, 3193–3208. There were, of course, other main categories which differed in some respects. For example the Stoic categories of substance (ὑποκείμενον), quality (ποιόν), disposition (πῶς ἔχον) and relative disposition (πρὸς τί πῶς ἔχον) provided a framework for their logical inquiries. de Lacy 1945, 247.

³⁹ Plot., 1.3.4.

While an overall treatment of a subject would contain a progression from existence, substance and quality,⁴⁰ the aim of a philosophical inquiry was often limited to rather specific questions. In the case of *Thras.*, Galen's expressed aim is to find the οὐσία of the subject being discussed.⁴¹

2.3 *Thras. and the Galenic Corpus*

In *Ord.Lib.Prop.*, Galen situates *Thras.* in a decidedly philosophical context.⁴² He describes *Thras.* as being useful (χρησίμων) to those who have studied his apodeictic treatises. Galen intimately links *Thras.* to *CAM*—a text which also attempts to define medicine through logical inquiry—claiming that it is the same kind of work (ἐκ τοῦτοῦ γένους). *Thras.* is not mentioned by Galen in *Lib.Prop.*, but *CAM* is. Rather than place *CAM* among his works on therapeutic methods, Galen situates it in the thematic category of *Works of use for logical proofs* (Περὶ τῶν εἰς τὰς ἀποδείξεις χρησίμων βιβλίων).⁴³ Thus, Galen indicates that the merits of *Thras.* and *CAM* are the methods used in these works rather than the actual subject matters they address. Ultimately, *CAM* and *Thras.* are related to works such as *Ars Med.* and *Part.Art.Med.*, because in each of these works, Galen endeavours to illustrate that his theoretical model of the faculty and parts of medicine is logically verifiable.⁴⁴

In the Galenic Corpus, the rhetorical conventions of a θέσις often occur when Galen portrays himself logically investigating a theoretical or philosophical problem, i.e. questions which cannot be answered strictly by sense perception or intellectual intuition. This kind of investigative discourse can occur within a work, for example, in his analytical division of the pulses in *Diff.Puls.*, or the whole work may take this form, such as *Thras.*, *CAM*, *Part.Art.Med.*, *Opt.Med.* and *QAM*.

III. Audience

3.1 *Dedicatee*

The stylized epistolary proems of *CAM* and *Thras.* lead one to seriously question whether their respective dedicatees are historical figures. Like *Thras.*, *CAM* is supposedly the

⁴⁰ Mansfeld 1990, 3199.

⁴¹ *Thras.*, H. 33.10–15 = K. 5.807.2–3.

⁴² *Ord.Lib.Prop.*, Boudon-Millot 2007a, 95.17–96.2.

⁴³ *Lib.Prop.*, Boudon-Millot 2007a, 164.1, 169.3–4. cf. *Ars Med.*, Boudon 2002, 275.1–4, 388.4–6.

⁴⁴ A scholarly treatment of *Part.Art.Med.*, which is preserved in Arabic and Latin, can be found in von Staden 2002b. The act of demonstrating the parts of an art via logical methods, such as *diaeresis* and *synthesis*, has its origins with Plato. de Lacy 1966b.

notes (ὑπομνήματα) from Galen's investigation of a question posed by his dedicatee Patrophilus. In the epistolary proem, Patrophilus is described as suffering a divine affection (θεῖον πάθος) to learn everything by demonstration (ἀπόδειξις) and method (μεθόδῳ). As in *Thras.*, this dedicatee, having listened to others address the problem, has sought Galen's expertise. Patrophilus' desire was to know what is the true 'constitution of medicine' (σύστασις ἱατρικῆς τέχνης).⁴⁵ Playing upon the Platonic imagery of the Socratic midwife,⁴⁶ Galen tells Patrophilus that although his 'soul is full of pain' (μεστὸς ὠδίνων τὴν ψυχὴν), with his help Patrophilus will find not only the answer to his question but also 'the light of truth shining on another substance much more beautiful than the one [he is] now seeking'.⁴⁷ Galen's description of Patrophilus is curiously similar to his image of the ideal student of medicine evinced in *Opt.Med.*⁴⁸ Interestingly, the kind of parental role that Galen portrays with this young philosopher-physician is reflected in Patrophilus' name, 'dear to one's father'.

In *Thras.*, Galen paints an image of Thrasybulus that is less than flattering, and therefore, somewhat out of place in a dedication. Unlike the meaning of his name, 'bold in counsel',⁴⁹ Thrasybulus is depicted as quite the opposite. Thrasybulus is portrayed as being reluctant to run the risk (κινδυνεύειν) of engaging in Galen's dialectical inquiry, which suggests that he is afraid of being embarrassed by Galen's formidable logical wit.⁵⁰ Here again, it is plausible that Galen is trying to evoke the Socratic imagery found in Plato's dialogues, i.e. the reluctant interlocutor who is far too familiar with the dangers of matching one's wits with the unnerving Socrates. Thrasybulus is clearly within Galen's circle of friends because he is said to be familiar with Galen's logical prowess and because Galen uses the term of endearment, Θρασύβουλε φίλτατε. Thrasybulus is also apparently sympathetic to Galen's position on athletics trainers because Galen remarks how 'you yourself know' (συγνώσκεις) that, even though the writings of athletics trainers are quite popular among the vulgar crowd, they are not worthy of a 'response from me' (ἀπόκρισις ὑπὸ ἐμοῦ).⁵¹

The titular formula used for both *CAM* and *Thras.* is atypical. In the Galenic Corpus and in other ancient Greek prose, typically the name of the dedicatee of a work will appear

⁴⁵ Fortuna 1997, 54.3–6 = K. 1.225.

⁴⁶ Dean-Jones 1995, 133–135.

⁴⁷ ...τὸ τῆς ἀληθείας φῶς καταλάμπων ἑτέραν οὐσίαν πολὺ καλλίοντα τῆς νῦν σοι ζητούμενης. *CAM*, Fortuna 1997, 54.17–18 = K. 1.225. In *Lib.Prop.*, Galen uses similar language to describe his own quest for truth, claiming that he sought the best Stoic and Peripatetic philosophers in order 'to stop the pain of my passion for logical proofs' (τὴν ὠδῖνα τῆς περὶ τὰς ἀποδείξεις ἐπιθυμίας παῦσαι). *Lib.Prop.*, Boudon-Millot 2007a, 164.6–16 = K. 19.115–116. cf. *Nat.Fac.* K. 2.179.

⁴⁸ Dean-Jones 1995, 134.

⁴⁹ Arist., *Rh.*, 1400b.19.

⁵⁰ *Thras.*, H. 35.4–11 = K. 5.809.3–9.

⁵¹ *Thras.*, H. 84.13–15 = K. 5.877.13–15.

either in the dative or in a ‘πρός + accusative’ formula, usually at the end of the title. However, when Galen cites the titles of these works, the name of the supposed dedicatee almost always appears in the nominative with or without the respective πρόβλημα spelled out.⁵² For example, in *Ord.Lib.Prop.*, the citations are as follows: ὁ Πατρόφιλος ἐπιγέγραπται περὶ συστάσεως ἰατρικῆς and ὁ Θρασύβουλος ἐν ᾧ ζητεῖται πότερον ἰατρικῆς ἢ γυμναστικῆς ἔστι μῦθον τὸ ὑγιεινόν. These are the only two works in the Galenic Corpus that exhibit this titular formula. It is quite curious that dedicatees who were important enough to have a work entitled after them are not mentioned elsewhere in the Corpus. While there are no other medical works outside the Galenic Corpus that have a similar titular formula, philosophical works attributed to Plato, Xenophon, Isocrates and Epicurus do exhibit this feature.⁵³ Although it is impossible to be certain, it seems that *CAM* and *Thras.* are not notes from actual events but works designed to situate a teaching in a recognizable socio-cultural setting in which philosophers are often depicted.

3.2 Addressees and the ideal audience

In respect to its audience, *Thras.* is a complicated work possessing a dedicatee, multiple addressees and an ideal audience. As will be discussed more fully in the next section, the presence of an ‘interlocutory-you’ is ever present in Galen’s use of the verbal and pronominal forms of the second person singular. In addition to this interlocutory-you, at a key juncture in this work, Galen also addresses an unnamed group of men. Having just concluded his διαίρεσις of the art of the body,⁵⁴ Galen suddenly responds to a group who are apparently voicing their objection to his use of names/terms (ὀνόματα): ‘Ὁ (ἰώ), some are saying in regard to these points that names should not be defined in whatever way I wish to call them but one should treat them in detail as they actually are.’⁵⁵ Galen uses the present tense to vividly stylize this statement as an unexpected objection raised in the process of his inquiry. The exclamation (ἰώ) expresses Galen’s dismay at the thought of moving the argument in a direction not to his choosing.⁵⁶ He warns these men that by undertaking such an investigation, he will be moving from ‘the examination of actual things’ (ἡ σκέψις περὶ πραγμάτων) to merely ‘an exegesis of names’ (ἐξήγησις ὀνομάτων). In other words, his inquiry would now shift to decidedly less secure premisses. Galen uses this unnamed group of auditors as

⁵² *San.Tu.*, K. 6.13.1, 136.7, 143.13; *Ord.Lib.Prop.*, Boudon-Millot 2007a, 95.21–25.

⁵³ DL, 10.28.

⁵⁴ Appendix B.

⁵⁵ ἰώ, φασί τινες ἐπὶ τούτοις, ἀλλ’ οὐχ, ὡς ἂν ἐγὼ φάναί βουληθῶ, διαιρεῖσθαι χρὴ περὶ τῶν ὀνομάτων, ἀλλ’ ὡς ὀρθῶς ἔχει διελεθῆναι. *Thras.*, H. 76.18–20 = K. 5.867.3–5.

⁵⁶ A TLG search reveals that this is the only place in the Galenic Corpus in which this exclamation is used, which seems to suggest that it was purposely introduced for dramatic effect.

scapegoats to explain why he is transitioning to these less logical types of proofs. Thus, in a way much like the tactic he uses in *Protr.* to justify his use of rhetorical arguments, Galen again uses an unexpected challenger to justify his use of less scientific arguments.

As to the ideal audience, in the epistolary proem, Galen points out that he also wrote *Thras.* for the benefit of his friends: ‘From what I happened to have trained myself, I thought it will be suitable also for you my friends to show the method (τὴν ὁδόν) which one may use to divide not only this problem but also all other problems.’⁵⁷ Galen thus envisions that *Thras.* will be useful to those within his circle of friends who have some training in logic. Therefore, *Thras.* is not an introduction to logic. According to Galen, through reading *Thras.*, this audience of friends will perhaps learn his ‘method’ of answering all types of problems. How such a claim would have been perceived by his target audience is unclear, but it does suggest that he is trying to make the work attractive to a broad audience.

3.3 Presence and role of the interlocutory-you

In the body of this work, Galen exclusively uses the second person singular as his form of address.⁵⁸ The ‘you’ in this work is never specifically identified. He is a figure who seems to be cast in the role of an interlocutor, i.e. the interlocutory-you. As was noted in the chapter on *HNH*, the second person singular was often used by Galen in conditional statements: ‘If you were to do or think X, then you would get Y’. The ‘you’ here is not an actual addressee but a convention of logical discourse. However, in *Thras.*, the second person singular plays a role in the actual presentation of Galen’s arguments. Here, an awareness of the interlocutory-you is one of the means by which Galen sometimes signals an important transition in the inquiry. The interlocutory-you sometimes introduces a proposition or question which will be addressed in the following passages.⁵⁹

Galen portrays himself as interacting with this interlocutory-you. For example, Galen uses either the second person singular imperative or the subjunctive to submit his claims for examination, i.e. ‘Consider X’.⁶⁰ He marks off a potential error in this addressee’s reasoning: ‘If you are putting forward (εἰ ἡγῆ) X, you have made an error in your thinking (οὐκ ὀρθῶς ἔγνωκας)’.⁶¹ Nevertheless, much like *Protr.*, *Thras.* presents only Galen’s side of this interchange. The use of this stylistic device to convey oral argumentation may explain why in

⁵⁷ ὅθεν, ὅπερ αὐτὸς ἐπ’ ἐμαυτοῦ πράξας ἔτυχον, ἱκανὸν ᾧμην ἔσεσθαι καὶ πρὸς ὑμᾶς τοὺς φίλους, δεῖξαι τὴν ὁδόν, ἣν χρώμενος ἂν τις οὐ τοῦτο μόνον ἀλλὰ καὶ τὰλλα πάντα διαιροῖτο προβλήματα. *Thras.*, H. 35.20–24 = K. 5.809.17–810.4.

⁵⁸ Appendix C, Table 4.

⁵⁹ *Thras.*, H. 65.21–24, 76.18–77.6, 98.5–9 = K. 5.851.15–19, 867.3–16, 896.4–7.

⁶⁰ *Thras.*, H. 39.1–7, 40.10–16, 45.11–13, 57.23–58.7 = K. 5.814.10–15, 816.9–15, 822.15–823.1, 840.14–41.6.

⁶¹ *Thras.*, H. 58.13–18 = K. 5.841.11–16.

Protr. and *Thras.* Galen uses the second person more frequently than in the other works in this study.⁶²

Galen's use of both the singular and plural forms of the phrase 'if you are willing' (εἰ βούλει and εἰ ἐθέλεις) is a telling sign that the interlocutory-you is a participant in this inquiry.⁶³ In some cases, this phrase is the main subordinate clause in a conditional statement. In others, it functions as an interjection in the body of sentence. The latter form reflects the decorum of an inquiry in which Galen is seeking permission from the addressee to advance to the next topic: 'Now, if you are willing, let us leave off from these matters, and let us consider again...'.⁶⁴ While such phrases in the present tense are a common feature in the Galenic Corpus, it is important to bear in mind that they are not simply a convention of statements of transition because they primarily occur in situations where Galen is submitting a claim/supposition to his addressee. Of the other Galenic works analyzed in my thesis—*HNH*, *Hipp.Vict.*, *Protr.*, *Lib.Prop.*, *Puls.* and *Form.Foet.*—only *Protr.* contains εἰ βούλει and εἰ ἐθέλεις in the present tense.⁶⁵ In *Protr.*, these phrases only begin to appear when Galen enters into his stylized investigation of the vocation of athletics. At these points, they are primarily used to introduce a literary citation as evidence for his claims. Nevertheless, the posture Galen takes toward the interlocutory-you in each work is different. In *Thras.*, the posture toward this 'you' is more congenial in nature, while in *Protr.*, it is clearly adversarial. The rhetorical effect of Galen's use of the second person singular in *Thras.* is for the audience to view themselves as participants in this inquiry through the figure of the interlocutory-you.

IV. Author

4.1 Presence and role of the author

Through his use of the first person singular and plural, Galen's presence is always evident in this inquiry. In respect to the epistolary proem and the body of this work, there is a quantitative difference between his use of the first person plural and first person singular. In the epistolary proem, Galen tends to use the first person singular more than the first person plural. 83% of the occurrences of the first person pronominal and verbal in the epistolary

⁶² Frequency of occurrence of the second person singular in the body of these works is as follows: *Thras.* (0.33%), *Protr.* (0.74%), *Puls.* (0.15%), *HNH* (0.08%) *Foet.Form.* (0.01%), *Lib. Prop.* (0%), Appendix C, Table 2.

⁶³ *Thras.*, H. 44.10, 45.11, 54.17, 63.18, 76.9, 76.10, 76.13, 76.15, 78.7, 86.9, 89.6, 94.23 = K. 5.821.8–9, 822.16, 836.3–4, 848.14, 866.12–13, 866.13, 866.16, 866.18, 869.6, 880.4, 884.3, 891.15.

⁶⁴ ταύτας μὲν οὖν, εἰ βούλει, παραλίπωμεν, ἐπέλθωμεν δ' αὐθις... *Thras.*, H. 44.8–9 = K. 5.821.8–9.

⁶⁵ *Protr.*, Boudon 2002, 101.21, 103.18, 104.4, 117.12 = K. 1.9.28, 10.26, 10.22, 14.25.

proem are in the singular.⁶⁶ However, in the body of this work, this trend somewhat reverses. Here, 61% of the occurrences of first person pronominal and verbal are in the plural.⁶⁷

The increased occurrence of the first person plural in the body of this work can be attributed to Galen's entering into the actual act of inquiry. As was noted, within an inquiry, the author and the audience are fellow investigators into the problem. Thus, statements such as 'Let us examine the type of the art of the body' intimate that the audience is to investigate the problem as well.⁶⁸ Likewise, statements, such as 'If we are to posit some other aim for this art, at a lower level of subdivision, the preceding argument will clarify this for us',⁶⁹ indicate that the 'we' in *Thras.* is inclusive of the audience because it would be quite odd for Galen to remind himself of how the two arguments are linked. This passage and others like it reaffirm that the audience and Galen are both examining each supposition or question. Furthermore, in instances where Galen is attempting to provide evidence to his arguments, the 'we' in *Thras.* often speaks to the collective experience of mankind. For example, when discussing whether the constitution or the function of each body part is more important, he uses χρῆζομεν to describe how 'we all need' our bodies to be in the proper constitution and to function properly.⁷⁰ Here, he appeals to the audience's commonsense by arguing that no one would want to walk feebly, or for their complexion to be imperfect. Therefore, mankind desires perfect constitution and bodily function.

The first person singular is used by Galen to indicate his personal obligation to the logical progression of this inquiry. Statements such as 'There remains one thing for me to show, namely that every art aims at a σκοπός and a τέλος' suggest to his audience that he must address all of the relevant questions to come to something conclusive.⁷¹ Conversely, he also uses the first person to absolve himself from addressing questions that he claims are not relevant to the task at hand, such as when he states, 'I presently do not need to define' (οὐδὲν εἰς γε τὰ παρόντα δέομαι διαίρειν) what the aim of the art of the body should be called.⁷² In other words, it is illogical for him to investigate the common terms used to describe the goal of medicine and gymnastics, because he first needs to find the actual aim of the art of the body. Although the audience is portrayed as a participant in this inquiry, Galen makes it

⁶⁶ Appendix C, Table 5.

⁶⁷ Appendix C, Table 7.

⁶⁸ ...ἐπισκεψώμεθα τὸ γένος τῆς περὶ τὸ σῶμα τέχνης. *Thras.*, H. 72.13–14 = K. 5.861.3.

⁶⁹ ταύτης δ' εἶπερ τι κατωτέρω ποιήσομεν ἕτερον τέλος, ὁ προειρημένος ἡμᾶς ἐκδέχεται λόγος. *Thras.*, H. 48.24–26 = K. 5.828.1–3. I have slightly modified Singer's translation. Singer 1997a, 63.

⁷⁰ *Thras.*, H. 45.7–46.6 = K. 5.823.12–824.2.

⁷¹ ἐν γὰρ μοι πρόκειται δεῖξαι τὸ πᾶσαν τέχνην καὶ σκοποῦ καὶ τέλους ἐφίεσθαι. *Thras.*, H. 48.13–14 = K. 5.827.8–9.

⁷² *Thras.*, H. 48.6–12 = K. 5.827.2–7.

abundantly clear, through remarks such as these, that he bears the burden of deciding whether a question/proposition is necessary to investigate or not.

Through verbs such as οἶμαι and νομίζω, as well as the verbal construction δοκεῖ μοι, Galen occasionally interjects his personal opinion into this inquiry.⁷³ In some cases, they serve to emphasize the logical nature of his conclusions. Statements, such as ‘I think this is very clear’ (τοῦτ’ εὐδελον εἶναι νομίζω),⁷⁴ reveal to the audience when Galen believes that he has sufficiently proven a point. These sorts of interjections are also used to project the comprehensiveness of his approach to proving a proposition. Before his διαίρεσις of the art of the body, he claims, ‘Moreover, the fact that the art is completely one thing according to the good of the body I think has been sufficiently revealed from what has already been stated, and from the following statements, it will no less adequately be displayed’.⁷⁵ While Galen does use impersonal and more definitive statements for his conclusions, statements of opinion, such as the aforementioned, allow Galen to intimate that he is accommodating his inquiry to the needs of his audience. This projects a more personal interplay between himself and the audience. Therefore, Galen’s approach to a θέσις allows for personal opinion at certain junctures.

Galen’s choice of tense for first-person verbs in the body of the work is also important to the audience’s interpretation of Galen’s role in the inquiry. In the epistolary proem, the first person occurs predominantly in the past tense because here he is recounting what led to the inquiry. However, in the body of this work almost all of the first person plurals and singulars are in the present or future tense. In this way, he portrays himself actively investigating the problem. When he uses the past tense of the first person within the body of *Thras.*, it is primarily to remind the audience of what he had already proven.⁷⁶ Considering that Galen is recounting the solution to Thrasybulus’ *problema*, Galen could have used the past tense; however, this stylistic choice would have moved him into the role more of narrator than inquirer.

In addition to using present tense, there are other stylistic features Galen employs in *Thras.* to convey the decorum of inquiry. This can be seen in the somewhat tentative manner in which Galen submits his position on what is the appropriate starting point of this inquiry.

⁷³ *Thras.*, (οἶμαι) H. 41.9, 54.22, 62.1, 63.19, 71.26, 75.3, 86.25, 90.11, 91.26, 95.16, 97.6 = K. 5.817.15, 836.11, 846.11, 848.17, 860.6, 864.18, 881.2, 885.16, 887.16, 892.13, 894.16, (νομίζω) H. 72.20 = K. 5.861.10, (δοκεῖ μοι) H. 55.6, 74.17, 75.13 = K. 5.837.2, 864.6, 865.10.

⁷⁴ *Thras.*, H. 72.19–20 = K. 5.861.8–9.

⁷⁵ ‘Ἀλλ’ ὅτι μὲν ἡ περὶ τὸ τοῦ σώματος ἀγαθὸν τέχνη μία πάντως ἐστίν, ἔκ τε τῶν εἰρημένων ἔμπροσθεν αὐτάρκως οἶμαι δεδεῖχθαι καὶ τῶν ἐξῆς ῥηθησομένων οὐδὲν ἥττον δεῖχθήσεται. *Thras.*, H. 71.24–27 = K. 5.860.4–7.

⁷⁶ *Thras.*, H. 76.7, 77.12, 83.13–14, 87.11, 87.15, 88.5, 91.15–16 = K. 5.866.10, 868.6, 876.4, 881.13, 881.17, 882.13, 887.5.

Instead of simply declaring what is the best course to take, Galen suggests, ‘So perhaps it is better’ (ἴσως οὖν ἄμεινον) to make the substance (οὐσία) of the art the starting point for their inquiry.⁷⁷ Such statements convey the exploratory nature of this discourse. Another way in which he accomplishes this is by his use of hypothetical imperatives: for example, ‘Let it make no difference in the present matter whether to call it *diathesis* or *schesis*’.⁷⁸ Here, the third person imperative indicates that this is an assumption that needs to be made in order for the argument to proceed in a more logical manner. The use of third person imperatives is a recurrent feature in *Thras.*, unlike in the other works examined in my thesis. Perhaps, the reason for this is that third person imperatives are more germane to this discourse because they are a polite way of advancing an inquiry.

V. Message

5.1 Structure and organizing principles

Although *Thras.* is quite polemical and a somewhat protracted θέσις, its overall structure is true to this genre. At the beginning of *Thras.*, the problem to be investigated is put forward in the form of theoretical question.⁷⁹ Thrasybulus’ question potentially could have been framed in a more practical way, i.e. ‘Should one seek the advice of a physician or an athletics trainer in matters of health?’. However, in keeping with the kinds of questions posed in theses, Galen frames it in philosophical language: ‘Whether that which is called healthiness belongs to gymnastics or medicine?’. The statement of Thrasybulus’ *problema* is followed by Galen’s survey of the possible starting points (ἀρχαί) for answering the question. Here, Galen investigates why making an inquiry using definitions (ὀρισμοί), aims (τέλη) or substances (οὐσίαι) of both medicine and gymnastics as one’s starting point would not lead to a quick and accurate conclusion. By and large, Galen’s survey is a διαίρεσις of the problem in that he addresses the potential approaches to the question. However, his exploration is also argumentative in nature. It is a kind of *reductio ad absurdum* in that it serves to establish the necessity of his own starting point by taking the opposite starting points and illustrating their fallacies.

Galen’s investigation is structured by propositions and questions. The audience is moved through a series of theoretical suppositions which are clearly related to the

⁷⁷ *Thras.*, H. 41.4–6 = K. 5.817.8–10 cf. *Thras.*, H. 44.18 = K. 5.821.17.

⁷⁸ διαφερέτω δὲ μηδὲν ἐν γὰρ τῷ παρόντι διάθεσιν ὀνομάζειν ἢ σχέσιν. *Thras.*, H. 46.21–22 = K. 5.824.16–17.

⁷⁹ Appendix B.

philosophical manner in which one revealed the substance (τί ἔστι) and quality (ὅποῖόν τί ἐστι) of subject.⁸⁰ Thus, Galen investigates the art of the body by trying to logically define its aim (τέλος), its primary good (τὸ πρῶτον ἀγαθόν) and to what model (παράδειγμα) of an existing art it is related.⁸¹ Likewise, he asks whether different activities (ἐνέργειαι), materials (ὕλαι) and theories (θεωρήματα) can be used to properly determine an art. In *Thras.*, changes in topic are signposted by explicitly stating the proposition or question that will be examined. Propositions are sometimes signalled with an articular infinitive construction, as in the previously mentioned statement, ‘There remains one thing for me to show, τὸ πᾶσαν τέχνην καὶ σκοποῦ καὶ τέλους ἐφίεσθαι’.⁸² The other distinctive structuring device is his use of direct and indirect questions via a variety of interrogative expressions: διὰ τί; τί τούτων; τί ἐστί; ἐν τίσι; πῶς οὖν; πῶς καὶ τίνα τρόπον.⁸³

As I have mentioned, Galen portrays his inquiry as following a logical progression. What is pivotal to this sense of progression is the perception that each question/ proposition has been sufficiently dealt with before moving to the next. Throughout *Thras.*, each topic is introduced in such a way as to illustrate that something is in question or needs to be confirmed, and each topic ends with Galen coming to a firm conclusion. For example, in the following transitional statement, Galen signals there will be a change in topic, first by stating the conclusion of the previous question: ‘By this it is clear that it is not necessary to posit many goods of the body or to posit that the productive art is one thing and the preservative another’.⁸⁴ After making this statement and remarking that those with more logical ability can understand the implications of this conclusion, he then goes on to reveal—for those lacking such logical abilities—why one should not posit that there are three goods for the art of the body: health, strength and beauty. He points out that all three of these goods are associated with health, and therefore, there is ultimately one good of the art of the body, namely health. In this case, accommodating his audience’s needs provides the impetus for pursuing the next question. In other cases, as was previously noted, he portrays his choice of questions as a matter of logical necessity. In addition to these kinds of transitions, Galen uses a variety of introductory phrases and clauses, such as ὡς καὶ δῆλον, ὥστε καὶ διὰ τοῦτο and ταῦτ’

⁸⁰ Mansfeld 1990, 3193–3212; 1992, 92–93.

⁸¹ Appendix B.

⁸² ἐν γάρ μοι πρόκειται δεῖξαι τὸ πᾶσαν τέχνην καὶ σκοποῦ καὶ τέλους ἐφίεσθαι. *Thras.*, H. 48.13–14 = K. 5.827.8–9. cf. 67.21–24 = K. 5.854.10–13, 74.20–75.3 = K. 5.864.9–18.

⁸³ *Thras.*, H. 46.10, 51.15, 52.22, 53.19, 55.5, 56.10 = K. 5.825.6, 831.15, 833.11, 834.17, 837.1, 839.15.

⁸⁴ Ὡς καὶ δῆλον, ὥς οὔτε πολλὰ τὰ τοῦ σώματος ἀγαθὰ χρή ποιεῖν οὔτ’ ἄλλην μὲν τιν’ αὐτοῦ δημιουργόν, ἄλλην δὲ φύλακα. *Thras.*, H. 49.7–9 = K. 5.828.10–12.

οὐν,⁸⁵ to stylistically emphasize the relationship between the previous conclusion and the subsequent topic.

Some of Galen's methods of examining particular problems have their own intrinsic principles of organization. For example, his divisions of the γένος of the art of the body would have been readily recognized as a kind of philosophical διαίρεσις. From Plato onward, dividing an art into its component parts was commonly perceived as the appropriate theoretical approach to defining an art.⁸⁶ The genre–species organizing principle underpins this approach. Using this deductive method, one begins with the most general class (γένος) and then moves through a series of intermediate classes until reaching the lowest species of the overall genus.⁸⁷ Each division of classes is based upon some differentiae. Thus, when defining an art, one would first classify its parts according to some similar attribute. This was typically followed by a description of the faculties of each part. And, lastly, the inquirer would 'fit one set of classes to another'.⁸⁸ In addition to defining an art, this was the theoretical manner in which one taught a *technē*. For example, in *Orat.* (1.42.190–191), Cicero outlines his goal to present the complete *ars* of civil law (*perfecta ars iuris civilis*). The method, which he says will make the art neither difficult (*difficilis*) nor obscure (*obscura*), is to divide (*digerere*) the whole art into general classes (*genera*), then to separate (*dispartire*) these classes into parts (*membra*) and then to reveal (*declarare*) the 'particular faculty of each by definition' (*propriam cuiusque vim definitione*). The following are the classes of Galen's διαίρεσις of the art of the body in *Thras.* (H. 71.24–75.2 = K. 5.860.4–864.9):

I. γένη of arts:

Acquisitive (κτητική) / Theoretic (θεωρητική) / Active (πρακτική) / Productive (ποιητική)

II. ἔργα of the productive art:

Creative (ποιεῖν ὅλον τι πρότερον οὐκ ὄν) / Restorative (ἐπανορθωτική)

III. μόρια of the restorative art:

Therapeutic (θεραπευτικόν) = ἰατρικόν / Preservative (φυλακτικόν) = ὑγιεινόν

Addresses large imbalances / Addresses small imbalances

⁸⁵ *Thras.*, (ὥτι καὶ δῆλον) H. 49.7 = K. 5.828.10, (ὥστε καὶ διὰ τοῦτο) H. 50.8 = K. 5.830.1, (ταῦτ' οὐν) H. 56.8 = K. 5.838.13.

⁸⁶ de Lacy 1966b. By the time Galen was writing, there had been other physicians who had tried to illustrate the parts of medicine via logical methods, such as *diaeresis* and *synthesis*. *Ars Med.*, Boudon 2002, 274.2–276.5.

⁸⁷ de Lacy 1966b, 123.

⁸⁸ de Lacy 1966b, 124; Plato, *Phaedrus* 270d.

IV. μόρια of the preservative art:

Recuperative (ἀναληπτικόν) / Healthiness (ὑγιεινόν) / Good condition (εὐεκτικόν)

In state (κατὰ σχέσιν) / In condition (καθ' ἑξίν) / In good condition (κατὰ εὐεκτικόν)

Addresses small imbalances / Addresses smaller imbalances / Addresses smallest imbalances

Galen uses the terms γένη, ἔργα and μόρια to express the different levels of his divisions.

Unlike Cicero's previously mentioned approach to teaching the art of civil law, Galen's διαίρεσις is designed to specifically illustrate to what part of the art of the body healthiness (τὸ ὑγιεινόν) belongs; thus, his division is selective and clearly investigative in nature, i.e. Galen first lists the possible species within a given class, and then he determines which species is associated with the production of health. Such a method of inquiry is dependent on the inquirer proving that he has adequately accounted for 'all' the species within each division. By making such a διαίρεσις of the art of the body, Galen's division is supposed to illustrate that γυμναστική is not even part of the primary divisions of this art. Of course, the persuasiveness of this argument is dependent on his audience's perception that all arts have a finite number of parts and that each part has its own aim or product.

5.3 Logical language and rhetorical appeals

In *Thras.*, Galen uses a great amount of philosophical language and concepts to convey the logical nature of his arguments. As was noted, in the epistolary proem, Galen associates the methods used in this inquiry with his approach to ἀποδείξεις.⁸⁹ The rhetorical value of framing one's logical methods in such a light can be discerned from the following statement by Epictetus:

Moreover, is it not necessary for anyone who would skillfully engage in reasoning that he demonstrate (ἀποδείξειν) each thing he asserts, and follows closely the demonstrations of others (τοῖς ἀποδεικνύουσι), and that he does not erroneously consider men's sophistic proofs as demonstrations (ἀποδεικνυόντων)? Therefore, the use and training of conclusive premisses and [dialectic] topics has come to us and they have displayed their necessity.⁹⁰

Among 2nd century AD Peripatetics, Stoics and Middle Platonists, claiming one's arguments were apodeictic was, in many ways, tantamount to claiming that they were 'scientific'

⁸⁹ See n. 6 in this chapter.

⁹⁰ μή ποτε οὖν καὶ τοῦτο ἀνάγκη προσλαβεῖν τὸν μέλλοντα ἐν λόγῳ συνετῶς ἀναστραφῆσεσθαι καὶ αὐτόν τ' ἀποδείξειν ἕκαστα ἀποδόντα καὶ τοῖς ἀποδεικνύουσι παρακολουθήσειν μηδ' ὑπὸ τῶν σοφιστομένων διαπλανηθήσεσθαι ὥς ἀποδεικνυόντων; οὐκοῦν ἐλήλυθεν ἡμῖν περὶ τῶν συναγόντων λόγων καὶ τρόπων πραγματεία καὶ γυμνασία καὶ ἀναγκαία πέφηνεν. Arrian, *Epict.*, Schenkl 1916, 7.11.1–12.2.

(ἐπιστημονικόν).⁹¹ From what survives of Galen's theoretical discourses on logic, he clearly paid more than lip service to developing his approach to ἀποδείξεις. Nevertheless, the way in which Galen demonstrated the logical nature of his arguments is reinforced by the language he uses to describe what he is doing.

Later in *Thras.*, Galen again picks up on this notion of ἀποδείξεις to illustrate that his approach to the question is somehow more epistemologically sound:

I have shown in *On Demonstration* that one must not use inductive arguments (ἐπαγωγᾶς) in scientific demonstrations (ἀποδείξεις ἐπιστημονικάς); therefore, whoever has been trained with that book will look down upon such a method, and will seek a better one...⁹²

Interestingly, the type of inductive arguments that Galen is frowning upon are the same sort of craft analogies that play a major role in his arguments. This may not be a contradiction of theory and practice because in the above passage, he may be speaking of the use of craft analogies as starting points for an inquiry, and therefore, he was not excluding them from logical inquiry altogether. Here, as in other places, Galen uses this sort of language as a strong appeal to his audience's *logos*. The audience is led to believe that Galen is striving for the most epistemologically secure, rather than the most persuasive, approach.

Thras. is replete with such overt claims as to the logical nature of his arguments. However, in some cases, the logical method is not explicit. For example, Galen declares, 'you would clearly perceive' (γνοίης ἐναργῶς) the nature of each type of health 'should you examine them the following way' (ἀνασκέψῃ τόνδε τὸν τρόπον).⁹³ This method is simply the categorization of health according to observable phases in the process of moving from sickness to health. Thus, the method of defining an object by some differentiae is applied, and here again, one finds Galen describing the epistemological merits of his claims.

The strongest appeals to his audience's sense of *logos* are Galen's claims about true and false definitions. At the outset of this inquiry, Galen points out that the understanding (τὸ γινῶναι) of a subject is either 'only the conception of the thing' (ἡ ἔννοια μόνη τοῦ πράγματος) or it is the perception of its 'essence/substance' (οὐσία).⁹⁴ What is meant by this statement is not explicitly spelled out, but its significance would have been appreciated by

⁹¹ This distinction goes back to Aristotle. In his treatment of dialectic and logic, Aristotle contrasts dialectical premisses with what he terms ἀποδείξεις (logical proofs). For Aristotle, the aim of the latter category is to produce knowledge (ἐπιστήμη), and the goal of the former is to logically illustrate one's point to an audience.

⁹² δέδεικται δ' ἡμῖν ἐν τοῖς περὶ ἀποδείξεως, ὡς οὐ χρηστέον ἐπαγωγᾶς εἰς ἀποδείξεις ἐπιστημονικάς· ὅσθ' ὅστις ἐν ἐκείνοις ἐγυμνάσατο, καταφρονήσει μὲν τῆς τοιαύτης ὁδοῦ, ζητήσει δ' ἑτέραν βελτίω, ... *Thras.* H. 37.20–26 = K. 5.812.14–813.2.

⁹³ *Thras.*, H. 39.1–3 = K. 5.814.10–12.

⁹⁴ *Thras.*, H. 33.9–12 = K. 5.807.2–3.

those who were philosophically inclined.⁹⁵ Galen's emphasis on using the method of διαίρεσις to determine the correct names (ὀνόματα) of the parts of the art of the body would have been appreciated by the aforementioned audience because it reflects the philosophical notion that the true name of a subject is defined by what the object actually is, i.e. its οὐσία.⁹⁶ This concept is again picked up in Galen's feigned reluctance to move his inquiry from 'the examination of actual things' (ἡ σκέψις περὶ πραγμάτων) to an 'exegesis of names' (ἐξήγησις ὀνομάτων).⁹⁷ Here, Galen argues that ὀνόματα should not be based on conventional definitions. He points out that the words used to describe things vary with language and dialect and therefore conventional definitions do not truly define the object.

Nevertheless, because Galen was 'compelled' by the aforementioned auditors to move to an exegesis of names, he makes judicious use of ancient testimonies for his etymological evidence. As would be expected in a discussion of the meaning of terms, Galen ignores contemporary definitions to focus on noteworthy figures of ancient Greek literary and scientific culture. Galen quotes from Homer, Hippocrates, Plato and Erasistratus to illustrate that medicine has primacy over gymnastics in matters of health. Galen points to the absence of the term γυμναστική in Homer's writings as evidence that it was not recognized at that time as an art of the body. He uses quotations from the *Odyssey* (4.230–1) and the *Iliad* (11.514–15) to illustrate that Homer recognized ἰατρική as an art that heals the sick with medication and surgery (χειρουργία).⁹⁸ However, Galen does not apply the same type of etymological principles that he does to γυμναστική because similar to γυμναστική, Homer never uses the term ἰατρική in the *Odyssey* or the *Iliad*. Although the *Odyssey* and the *Iliad* contain numerous positive images of athletics, Galen selects the character Epeius as evidence that Homer recognized some forms of athletic training to be of no practical value to warfare or peacetime tasks.⁹⁹

Overlooking the somewhat problematic figure of Herodicus of Selymbria, who is described by Plato as being a παιδοτρίβης who mixed γυμναστική with ἰατρική to promote longevity and health,¹⁰⁰ Galen instead points to Hippocrates as the appropriate source of knowledge on both therapeutics and exercise.¹⁰¹ While it is true that the Hippocratic Corpus contains information concerning healthy exercise, the term γυμναστική appears only

⁹⁵ Singer 1997a, 408, n. 53.

⁹⁶ Galen's theoretical approach to naming reflects what was expressed by Plato in works such as *Cratylus* (388b10–11). Fine 1977.

⁹⁷ *Thras.*, Chap. 32.

⁹⁸ *Thras.*, H. 78 = K. 5.869.

⁹⁹ In respect to Galen's discussion of Epeius, see *Thras.*, H. 79 = K. 5.870–871; *Iliad*, 23.

¹⁰⁰ Plato, *Resp.*, 3.406; *Prt.* 316e; *Phdr.*, 227d; Jüthner 1909, 10.

¹⁰¹ *Thras.*, H. 80 = K. 5.872.

twice in the Hippocratic Corpus, and both occurrences are in the same passage of *Loc.Hom.*¹⁰² Thus, Galen has chosen Hippocrates not for etymological reasons. Instead, Hippocrates is mentioned only to emphasize medicine's role in health.

In respect to Plato, Galen uses his interpretation of a number of passages from the Platonic dialogues, such as *Gorgias* 463e–464a, to support his notion that there is one art of the body. In this passage, Plato proposes that either an ἰατρός or τῶν γυμναστικῶν τις would be able to detect whether someone is truly in good bodily condition (εὖ ἔχειν τὸ σῶμα). Plato goes on to say that there are two μέρη concerning the good condition of the body: γυμναστική and ἰατρική. Thus, Galen raises a problematic issue. Plato's division of the art of the body is different from Galen's in that Plato's division places medicine and gymnastics in the same class.

Rather than accepting Plato's statement at face value, Galen rectifies this problem by claiming that Plato is using the term γυμναστική in place of ὑγίεινή. The reason for this, Galen claims, is that Plato viewed γυμναστική as the most remarkable (ἐξάριετον) part of the healthy art and the only part that needs a steward (ἐπιστάτης). Thus, Galen assimilates Plato's position to his own in order to preserve his division of the art of the body. In respect to the other citations of Plato in *Thras.*, Galen selects passages to support his claim that Plato's and Hippocrates' notions of γυμναστική are similar. He argues that both authorities believed that exercises that aimed at producing an athletic condition were unhealthy, and therefore, such practices were not proper to γυμναστική.¹⁰³

Galen's etymology ends with Erasistratus, who he claims is the first to actually distinguish between ὑγίεινή and ἰατρική.¹⁰⁴ Galen quotes passages from the first book of Erasistratus' *On Healthiness* (ἐν τῷ προτέρῳ τῶν Ὑγιεινῶν) to illustrate that Erasistratus held that the practitioners of healthiness were different from the practitioners of medicine. At the end of Galen's incomplete etymology of ἰατρική, γυμναστική and ὑγίεινή, he points out how this exercise does not reveal anything epistemologically secure about these terms. Thus, the audience is again reminded that Galen's διαίρεσις of the art of the body is the appropriate method of defining its parts. This raises the question: Why even address this matter of ὀνόματα?

Aside from giving the appearance of an exhaustive inquiry, Galen's etymological treatment of these terms serves two important rhetorical purposes. First, in respect to the decorum of this genre, it illustrates Galen's ability to logically respond to an objection raised

¹⁰² *Loc.Hom.*, 35.1–2.

¹⁰³ *Thras.*, H. 78–83 = K. 5.869–876.

¹⁰⁴ *Thras.*, H. 86–87 = K. 5.880–881.

by the aforementioned auditors. Galen's willingness and ability to address their concerns over the correct names of the parts of the art of the body illustrate his philosophical ἔθος. Secondly, he uses his discussion of the historical definitions of these terms as an opportunity to attack the favourable cultural image of athletics. In the course of discussing his predecessors' definitions of gymnastics, he illustrates how the generally positive image of athletics training held by the ancients has little to do with the current practices of athletics trainers.

3.4 Polemical remarks and logic

Galen's polemics are not 'digressions' because there is often a logical build-up to these polemical remarks and because such remarks support some of the argument in his inquiry. For example, his portrayal of the aforementioned athletics trainer's illogical behaviour serves to confirm what Galen had previously demonstrated, namely that those who teach gymnastic exercises are technicians much like bakers and cobblers.¹⁰⁵ Thus, just as a physician instructs a baker or cobbler in how to make healthy bread or shoes, the physician is also the overseer of teachers of gymnastic exercise in that he directs the trainer as to what exercises are best for the health of the individual. Therefore, the physician is comparable to a general in that he is the overseer of subordinate technicians. Having used this craft analogy in the previous chapter, in the next chapter Galen describes the uncouth manner in which the previously mentioned athletics trainer tried to debate about massage and exercise. Galen points out that this trainer was acting like a baker (μάγειρος) or a grinder (σιτοποιός) who had the audacity (τόλμημα) to challenge Hippocrates' knowledge of the medicinal properties of bread and gruel because Hippocrates never spent time in the kitchen. In this way, Galen uses this 'event' to illustrate what he has previously argued.

In *Thras.*, most of Galen's polemical remarks occur when the inquiry turns to matters of εὐεξία and exercise. At these moments, his criticisms of athletics and training are similar to those made in *Protr.* However, in *Thras.*, these critical remarks are made to appear more philosophical. Unlike *Protr.*, Galen's arguments against athletic exercise are supported by rather detailed theoretical discussions of the different types of health and healthy exercise, and he relies on the δόξα of philosophers and physicians, rather than of poets and myths as he does in *Protr.*

If we disregard the simple notion of Galen's polemical remarks being the digressions of a wandering mind, one can observe that these remarks are rhetorical in nature. On one hand, they function as 'red herrings' in that they introduce an emotional secondary subject

¹⁰⁵ *Thras.*, H. 96–97 = K. 5.894–896.

which leads the audience's attention away from calmly examining the logical veracity of his proofs. On the other hand, Galen's polemical remarks reinforce the practical issues behind Thrasybulus' question. Without such remarks, Galen's inquiry would not necessarily persuade the audience as to whom they should turn in matters of health. Thus, in respect to the competitive nature of the medical marketplace, the implicit purpose of *Thras.* is to create a clear separation between the practices of athletics trainers and those of physicians.¹⁰⁶

The distinction between the two fields was not as obvious as one would think. By the time Galen was writing, there were a number of athletics trainers who had written works on massage (τρίψις), good condition (εὐεξία), health (ὑγίεια) and gymnastic exercises (γυμνάσια).¹⁰⁷ Furthermore, philosophical authors often compared the two fields to each other. From Plato to Alexander of Aphrodisias' *Ethical Problems*, one finds the two fields often being compared to each other.¹⁰⁸ In general, the gymnastic art is described as dealing with the wellbeing (εὖ ἔχον), beauty (κάλλος) and function (ἐνέργεια) of the body, while medicine dealt with the treatment of disease and the health (ὑγίεια) of the body. Thus, in respect to healthy bodies, there were ample reasons for a blurring of the two fields' competence. Although it is doubtful that the relationship between the two groups was as agonistic as Galen portrays in his works on health, there can be little doubt that they were sometimes viewed as competing factions. For example, in his *Gymnasticus* one finds Philostratus lampooning the physician's knowledge of the healthy regimen while praising the benefits of proper athletic training. Both Philostratus' and Galen's works reveal that the role of physicians and athletic trainers in matters of health was a potentially contentious issue for those within and outside of the profession of 'health-care'.¹⁰⁹

VI. Conclusion

In *Thras.*, Galen pays an inordinate amount of attention to making the logical reasoning behind his inquiry explicit. The audience is confronted with an author who repeatedly breaks into philosophical discussions about the epistemological value of his arguments and who often attempts to explain why he has chosen a particular line of inquiry. Thus, unlike many of his other works, Galen's emphasis in *Thras.* is on the rationale behind

¹⁰⁶ As to the nature of this debate, see Ibáñez 2003; König 2005, 254–300. For a discussion of Galen's writings on health and therapeutics, see Wöhrle 1990, 213–248; van der Eijk 2008, 297–300.

¹⁰⁷ *Thras.*, H. 83–85 = K. 5.876–879.

¹⁰⁸ Alexander, *Eth.Prob.*, 153.6–9.

¹⁰⁹ König suggests that Philostratus' *Gymnasticus* may be a response to Galen's denigration of athletic trainers and athletics. König 2005, 301, 301–344.

his approach to the question rather than simply providing a reasonable solution to the question.

One of the possible reasons for Galen's making his logical process in *Thras.* so 'transparent' can be discerned from his remarks in the epistolary proem. Galen points out that *Thras.* may be useful for those who want to learn the method for answering all types of questions.¹¹⁰ Thus, it is possible that Galen is accommodating his approach so that the audience may learn his methods. Another reason may be that Galen was eager to establish his philosophical credentials. In other words, such ostensibly philosophical language is suited to his overall program for medical thought to be considered as having the same rigor and epistemological merits as philosophy. This also seems to explain why his approach to the thesis is ostensibly more 'logical' in his use of language and concepts of formal logic when compared with many of the other works in the 1st and 2nd century AD that are identified as theses.

With *Thras.* and similar works, Galen cuts a unique figure for himself among his medical predecessors and contemporaries. The only 'medical' figure who pays similar attention to the language of logic is Sextus Empiricus. However, from what survives of Sextus' works, one would expect such language because Sextus was writing on decidedly philosophical, rather than medical, topics. *Thras.*, on the other hand, is a work whose subject matter pertains to medicine.

As this analysis has hinted, *Thras.* is a complicated work in that it aspires to be a rigid, logical inquiry of a subject but often descends into forceful and bitter polemics. Galen has chosen a genre of discourse that has a philosophical pedigree, and in so doing, he has signified to his audience that his answer to Thrasybulus' question has epistemological merit. The polemical remarks in *Thras.*, however, belie the notion that this work was written strictly to teach logic or to investigate a philosophical problem. While in many of his works Galen reveals that he is a habitual digresser, in *Thras.* Galen's polemical remarks are not merely digressions; they are a subtext to his expressed purpose and they indicate to the audience the social-medical value of Thrasybulus' question. Via such remarks, Galen paints the athletics trainer's *ethos* as being far removed from the intellectual and cultural values of his audience of πεπαιδευμένοι. However, his attack on athletics training and trainers is quite different from the ones he makes in *Protr.* In *Thras.*, Galen is demonstrating how he is able to address a πρόβλημα with all the social and intellectual decorum of a philosopher, thereby revealing that he is logically the appropriate expert in matters of health.

¹¹⁰ *Thras.*, H. 35 = K. 5.809–810.

Introduction to Medical Practice:
Εἰσαγωγαί and *De pulsibus ad tirones*

I. Introduction

As much as is useful for beginners to know concerning pulses, dear Teuthras, will be recounted herein. You have the whole art of the pulse written elsewhere.¹

With these brief introductory remarks, Galen informs his audience that *De pulsibus ad tirones* (*Puls.*) is designed for beginners. While it is common to find modern scholarship on Galen's activities as an author, physician and philosopher, it is far less common to find a serious consideration of him as an author concerned with the teaching of medicine. However, by claiming that he wrote works for students who were beginning their studies, Galen portrays himself as an educator, which makes one wonder how and why he taught these 'beginners'. Therefore, one of the aims of this chapter is to shed some light on the practical elements of Galen's isagogic teaching methods.

Puls. provides an example of Galen conducting his introductory course via the written word, which in turn allows us to address some interrelated questions. First, what was Galen's didactic and rhetorical strategy for these beginners? What kind of information did he omit from *Puls.* to make it comprehensible to the beginner? How does Galen present himself to his audience?

Secondly, for whom was this work written? Was it written for practitioners or for those with a general interest in medical topics? If *Puls.* was written for a practitioner, at what stage in his training was he? Was it written for a complete neophyte to medicine or an experienced physician who has simply not been trained in the medical use of the pulse?

Thirdly, how was this text to be used? Was it to be read by a teacher who will be instructing beginners? Or, was it for the student? Was it a manual to be consulted *ad hoc*? Or, was it a work to be read and understood prior to training?

Pragmatically speaking, writing an introduction to the pulse is problematic in that the very nature of this subject is difficult to teach to beginners. Anyone who has taught a student

¹Ὅσα τοῖς εἰσαγομένοις, φίλτατε Τεῦθρα, χρήσιμον ἐπίστασθαι περὶ σφυγμῶν, ἐνταῦθα λεχθήσεται. τὴν δ' ὅλην ὑπὲρ αὐτῶν τέχνην ἐτέρωθι ἔχεις. *Puls.*, K. 8.453.1–3. I have benefited from Singer's translation and notes to *Puls.* Singer 1997a, 325–344, 432–433. A modified version of this chapter will appear in Curtis 2009. I would like to thank Liba Taub and Aude Doody for their helpful comments and suggestions which contributed to this chapter's final form. Two recent works on the content of *Puls.* can be found in the following: Boudon 1994, 1441–1445; Bacalexi 2001. An analytical outline of *Puls.* can be found in Appendix B.

how to take a pulse will readily admit that it is not a simple task for a beginner to even find his pulse. In addition to having to correct the student's hand position and pressure, the teacher often finds himself struggling to find the words that will explicitly tell the student what to look for, especially with irregularities in the pulse. The effective teacher must schematize the sensations being perceived by the student so that he will be able to comprehend what to feel for and what to reject as being superfluous sensations.²

Another important factor to consider in regard to *Puls.* is the status of its subject. Judging from Galen's other writings, the taking of a patient's pulse had become a persuasive way in which a physician could convey the veracity of his diagnoses and prognoses. Thus, in respect to patient–physician interaction, an ancient physician's use of the pulse would have a somewhat similar effect on the patient as the modern day physician's use of a stethoscope or an ECG. Galen's prognostic feats in *Praen.*, which has the hallmarks of a propaganda piece written for popular consumption,³ demonstrate his society's fascination with the pulse and its apparent value in medicine. In this work, Galen provides accounts of his prognostic feats which serve as explanations as to why he earned the attention of the most prominent men and women in Rome. Of all the prognostic techniques Galen describes in this work, it is his knowledge and skill in taking the pulse that figures most prominently in *Praen.*⁴ *Puls.* teaches a specialized medical technique that, by the 2nd century AD, was informed by an array of theoretical concepts and terminology.

II. Didactic Strategy

In *Ars Med.*, *Lib.Prop.* and *Ord.Lib.Prop.*, Galen describes the audience and the kind of information presented in *Puls.*⁵ In *Ars Med.*, Galen separates *Puls.* from his four major treatises on the pulse: *Diff.Puls.*, *Caus.Puls.*, *Dig.Puls.* and *Praes.Puls.* These four treatises together constitute Galen's magnum opus on the pulse, his so-called *Treatise on the Pulses* (ἡ

² The plethora of pulse signs, terms and theories which appear in ancient writings on the pulse do not dovetail with our current understanding of what can be perceived with palpation because they are not based on the same empirical methods and physiological models as modern medicine. Nevertheless, some of the basic principles of this body of knowledge were undoubtedly derived from experience. Lloyd 1987, 282–284; Kümmel 1974, 1–22. In regard to the origins and developments of ancient pulse theory, see von Staden 1989, 262–288.

³ Nutton 1979, 59–63; 1988, 50–62.

⁴ *Praen.*, Nutton 1979, 100–103, 128–135 = K. 14.631–633, 660–665.

⁵ Considering that *Ars Med.*, *Ord.Lib.Prop.* and *Lib.Prop.* were written in the twilight of his career, Galen could be looking at *Puls.* in a quite different light than when he originally dictated it. However, the picture Galen paints of *Puls.* in these works is confirmed by an analysis of the text itself.

περὶ τῶν σφυγμῶν πραγματεία).⁶ Although *Puls.* addresses the same topic, namely diagnosis and prognosis via the pulse, Galen sets apart *Puls.* on the basis that it was written for beginners. Galen also distinguishes *Puls.* from a future work on the pulse, which he describes as a kind of summary of all his books (ἐπιτομὴ ἀπάντων), i.e. his four treatises on the pulses. Here Galen seems to be referring to his auto-epitome of his treatises on the pulse, *Syn.Puls.*, which appears in K. 9.431–549. Although the terms ἐπιτομή and εἰσαγωγή do not necessarily denote different forms of introductory writings, in this case, Galen is using ἐπιτομή to denote a kind of writing that presents another larger work in an abbreviated form by excerpting passages from the larger work.⁷ The expressed purpose of *Syn.Puls.* was specifically to remind the reader of the basic contents, principles and arguments contained in his *Treatise on the Pulses*,⁸ all of which suggest that *Puls.* was not merely a summary of his *Treatise on the Pulses*; it is a work whose content has been designed to introduce beginners to a subject and not a book.⁹

Lib.Prop. is more explicit as to the didactic nature of the *Puls.* Here one finds Galen remarking how he dictated (ὑπαγορευθῆναι) a variety of works ‘for beginners’ (εἰσαγόμενοι or ἀρχομένοι μανθάνειν).¹⁰ Galen suggests that these works were written not for publication but for the needs of students. Galen suggests that *Puls.*, along with his other works for beginners, served a specific didactic function within his corpus of works. He notes in regard to this isagogic works, ‘It is clear that those things which were written for beginners are of course neither complete (τέλειον) in their teaching nor discussed with precision (διηκριβωμένον) since beginners would neither need this nor would they be able to accurately learn everything before obtaining some skill in what is necessary.’¹¹ Thus, he makes it quite clear that some material has been left out because the beginner lacked the experience to comprehend an exhaustive account of the subject.

Later in *Lib.Prop.*, Galen reveals why *Puls.* is neither complete nor precise in its treatment of the pulses. This comes in the form of a response to his critics as to why he left out a discussion of systolic pulse and its use in diagnosing pulses particular to fevers. He argues that this topic was too large of an inquiry for beginners. He claims that he left out the

⁶ *Ars Med.*, Boudon 2000, 390.12–391.9 = K. 1.410. Galen’s *Treatise on the Pulses* appears to have been composed sometime after his return to Rome (AD 169) and before the accession of Commodus (AD 180). Bardong 1942, 633–634; Ilberg 1889, 44.219.

⁷ MacLachlan 2004, 64–86.

⁸ *Syn.Puls.*, K. 431.1–435.5.

⁹ Mansfeld 1994, 198.

¹⁰ *Lib.Prop.*, Boudon-Millot 2007a, 136.25–137.20 = K. 19.11–12. cf. *Ord.Lib.Prop.*, Boudon-Millot 2007a, 88.1–13 = K. 19.49–50. In regard to dictation in the ancient world, see Dorandi 1993, 71–83.

¹¹ τὰ γοῦν τοῖς εἰσαγομένοις γεγραμμένα πρόδηλον δήπου μήτε τὸ τέλειον τῆς διδασκαλίας ἔχειν μήτε τὸ διηκριβωμένον, ὥς ἂν οὔτε δεομένων αὐτῶν οὔτε δυναμένων ἀκριβῶς μανθάνειν πάντα, πρὶν ἔξιν τινὰ σχεῖν ἐν τοῖς ἀναγκαίοις. *Lib.Prop.*, Boudon-Millot 2007a, 136.9–13 = K. 19.10–11.

doctrine of systole because it was easier for the beginner ‘prior to training’ (πρότερον γυμνάσασθαι) to consider systole as being imperceptible.¹² By this, Galen indicates *Puls.* was composed for beginners who were seeking a practical knowledge of the pulse. Here again, he indicates that the material covered in *Puls.* was useful before practice. Such a perspective of *Puls.*’s audience is buoyed by Galen’s censure of *Puls.*’s critics as being ‘those who have not learned with a teacher, but, according to the proverb, navigate from books.’¹³ Galen is claiming that there is a distinction to be made between those who are pursuing practical knowledge of the pulse via training and those who merely desire a theoretical knowledge derived from books; *Puls.* is for the former group.

In *Ord.Lib.Prop.*, Galen describes the kind of beginners he has in mind for *Puls.* Galen recommends *Puls.* alongside *De ossibus ad tirones (Oss.)* and *De sectis ad eos, qui introducuntur (SI)* as introductory works in a curriculum that moves from basic to more detailed accounts of medical topics. What is intriguing about this list is that Galen mentions two different types of readers. The first group appears to be those who are able to discern truth through logical proofs. The second group is composed of those who gain knowledge by acquiring correct doctrine (κατὰ δόξαν ὀρθήν), which he says the ancients characterized as practical knowledge (πρᾶξις).¹⁴ It seems that Galen is recommending the aforementioned isagogic works to the second group, those not gifted and trained in logical proofs.¹⁵ Such a conclusion is reasonable given that the second group would require the correct doctrine contained in these isagogic texts while the first group would be free to move past these texts to more complicated and theoretical works because the first group has the ability to discern the truth without depending on correct doctrine.

Having addressed how *Puls.* is presented in these works, let us now turn to the text itself. As was noted, in the epistolary proem of *Puls.*, Galen declares that he has written ‘as much as is useful for beginners to know concerning pulses’ (ὅσα τοῖς εἰσαγομένοις χρήσιμον ἐπίστασθαι περὶ σφυγμῶν). Here, Galen is indicating that he has left some

¹² *Lib.Prop.*, Boudon-Millot 2007a, 158:18–20 = K. 19.32.

¹³ Ἄλλ’ οἱ μὴ μαθόντες παρὰ διδασκάλους, εἰκότες δὲ κατὰ τὴν παροιμίαν τοῖς ἐκ βιβλίου κυβερνήταις τοιαῦτα ζητοῦσιν.... *Lib.Prop.*, 158:24–26 = K. 19.33.

¹⁴ In some ways, Galen is echoing Plato’s comments on the epistemological value of learning correct opinion (ὁ ἔχων δόξαν ὀρθήν) in *Meno*, 96d–99d. In this text, Plato points out that correct opinion is a form of knowledge, but it is not the best form of knowledge because it does not fully educate the student as to the method of arriving at such correct opinions on their own. This hierarchy of methods is reflected in Galen’s own emphasis on logical proofs over dogma in the acquisition of medical knowledge.

¹⁵ *Ord.Lib.Prop.*, Boudon-Millot 2007a, 91:13–92.7 = K. 19.53–54. cf. *Syn.Puls.*, K. 9.431.1–432.12. In his introduction to the Platonic dialogues, Albinus, Galen’s former Platonist teacher, also gives two different orders of study for two different types of potential readers. Boudon-Millot 2007a, 107; Mansfeld 1994, 117–126; Göransson 1995, 78, n. 2.

information out which he did not consider χρήσιμον for beginners. But, what kind of information was left out?

The explicit answer is he omitted material that he perceived to be simply too difficult for a beginner to grasp. This can be observed in Galen's comments in *Puls.* concerning why he left out some material: 'I think these aforementioned things concerning the differences of the pulses are sufficient for beginners. If anyone wants to approach this topic more precisely (ἀκριβέστερον) there is a complete work which has been written by me on *Distinctions between Pulses*.'¹⁶ Galen then goes on to say that he will not talk about full (πλήρης) and empty (κενός) pulses or rhythms (ῥυθμοί) because this information is present in *Distinctions between Pulses*, a work which he describes as being complete (ὅλον) and precise (ἀκριβές). He explains that including such a complete and precise account would make the subject too unclear (ἄσαφέστερος) for the beginner. With these comments, Galen assures his audience that he has tailored *Puls.* to include only what is essential for a beginner to know.

What type of knowledge, i.e. practical versus theoretical, does Galen perceive to be χρήσιμον to the beginner? It is quite clear that *Puls.* was not written to take the place of experience. In numerous places, Galen stresses the importance of practical training and experience to gain an adequate knowledge of the pulse. He points out how only those physicians who have meticulously trained themselves are able to recognize generally unrecognizable types of pulses.¹⁷ He advocates training one's sense of touch, as well as obtaining as much experience as possible, in order to gain a precise understanding of the common manifestations of the pulse in various conditions.¹⁸ Although Galen stresses the importance of experience, he does not provide the reader with a detailed step-by-step process for taking the pulse, nor does he focus on imparting a vast amount of practical information that might be helpful when one runs into trouble discerning various pulses. Therefore, he does not suggest that this written work will take the place of a teacher.

What *Puls.* provides are the basic theoretical principles that are useful to the acquisition of practical knowledge of the pulse. In an important didactic interjection, Galen reveals to his audience the relationship between theoretical and practical knowledge:

Therefore, I prescribe training one's reasoning abilities (λογισμὸν) at the same time as one's sense of touch, that it be possible to discern the pulse in practice itself and not only distinguish it in theory (λόγῳ).

¹⁶ ταῦτά μοι ἀρκεῖν δοκεῖ περὶ τῆς τῶν σφυγμῶν διαφορᾶς τοῖς εἰσαγομένοις εἰρῆσθαι. εἰ γὰρ τις ἐπὶ τὸ ἀκριβέστερον αὐτὸ ἐρχεσθαι βούλοιτο, βιβλίον ὅλον ἔχει περὶ τῆς τῶν σφυγμῶν διαφορᾶς ὑφ' ἡμῶν γεγραμμένον. *Puls.*, K. 8.460.17–461.2.

¹⁷ *Puls.*, K. 8.487.1–12.

¹⁸ *Puls.*, K. 8.462.6–463.6, 478.2–16.

Education via theory (ἡ διὰ τοῦ λόγου διδασκαλία) is the starting point of practical experience.¹⁹

For Galen, it is important for a future practitioner to be informed by theory before or during the process of gaining experience. However, as we will see, this theory is at a lower level of explanation. By education via theory (ἡ διὰ τοῦ λόγου διδασκαλία), Galen is assumedly pointing to knowledge of the proper pulse terminology. With this knowledge, a student is able to define and categorize what he perceives via touch. However, Galen is clear that only experience provides the specificity and skill needed to recognize important nuances in a degree that cannot be fully expressed in words. He points out, for example, that the degrees of frequency that are indicative of a pathology, such as *pleuritis*, often defy being defined by a term. Therefore, *Puls.* provides the basic pulse terms and concepts in order to assist the beginner in his acquisition of knowledge via experience, which will ultimately lead to a more complete understanding of the pulses.

So, how does Galen bring theoretical concepts within the grasp of the beginner? One of the ways he does this is to leave out detailed discussions of causality. In his preface to *Caus.Puls.*, Galen claims that he omitted theories of causation from *Puls.* because he thought it was better for the beginner to be trained in the practice itself before addressing the theoretical account of causation.²⁰ Another way in which Galen brings the theoretical within the grasp of the beginner is to simplify his presentation of pulse terminology. This is accomplished by simply limiting the number and types of pulse terms he is willing to define. However, it is not just the omission of pulse terms that make *Puls.* an introductory work; it is also his avoidance of citing conflicting theories of pulse terms.

Instead of addressing these differences, he simply and succinctly defines each term as if there is no question as to their veracity and specificity. Thus, his approach in *Puls.* stands in stark contrast to *Diff.Puls.* According to Galen, the subject matter addressed in *Diff.Puls.* is integral to his other treatises because it addresses the annoying wordplay that Sophists may use in regard to pulse terminology and because it follows closely the works of others who correctly recognized the relationship between pulse terms and pulse signs.²¹ In *Diff.Puls.*, Galen relies heavily on logical methods to demonstrate the veracity of his system of pulse

¹⁹ ἀσκεῖν οὖν παρακελεύομαι τόν τε λογισμὸν ἅμα καὶ τὴν ἀφῆν, ὡς ἐπ' αὐτῶν τῶν ἔργων γνωρίζειν δύνασθαι τοὺς σφυγμοὺς, οὐ λόγῳ διακρίνειν μόνον. ἀρχὴ δὲ τῆς ἐπὶ τῶν ἔργων τριβῆς ἡ διὰ τοῦ λόγου διδασκαλία. *Puls.*, K. 8.478.2–5. The term λόγος, which is often difficult to translate because of its numerous connotations, in the above translation seems to be referring to logically deduced pulse terms. I have translated it as theory because determining both the number and kinds of terms, for Galen, required analytical reasoning. Furthermore, by ἡ διὰ τοῦ λόγου διδασκαλία, Galen seems to be referring to the kind of logical methods used to determine pulse terminology found in *Diff.Puls.*, which he also refers to as a διδασκαλία λόγου. *Diff.Puls.*, K. 8.507.11–16.

²⁰ *Caus.Puls.*, K. 9.106.3–106.9.

²¹ *Diff. Puls.*, K. 8.499.15–500.5.

terminology. *Diff.Puls.* contains long and elaborate explanations concerning the correct number, name and categories of pulse terms, and in this work, Galen often attempts to denigrate pulse theories that do not correspond to his system. Therefore, didactically speaking, *Diff.Puls.* provides a deeper understanding of the subject by engaging the reader in a pursuit of proving ‘why’ certain pulses must exist. With *Puls.*, Galen has circumvented these kinds of complex logical arguments in order to avoid a theoretically dense account of pulse terminology.

Another didactic strategy he employs in *Puls.* is to restrict himself to putting forward only the general principle. For example, in *Puls.*, Galen simply states that, ‘Men generally (ἐπίπῳν) have a much greater pulse than women, and in a similar manner they have a much stronger and a little slower and sufficiently more sparse pulse.’²² Having made this statement, Galen then moves to the next dogmatic statement offering neither an explanation nor any signs that indicate why the aforementioned statement is true. However, in *Caus.Puls.*, he explains why this pulse doctrine is generally true and what the exceptions to this rule are.

In *Caus.Puls.*, Galen adds theoretical concepts of causality to the material presented in *Puls.* Galen reveals in the beginning of the second book of *Caus.Puls.* that he is about to expound upon what has either been completely left out or was not fully treated in *Puls.* In regard to the limited material covered in *Puls.*, he explains, ‘For I think it useful to leave out everything that was possibly unclear for those beginning from theory. Most of all the logical explanation of cause has been left out. For it was better for beginners first to be empirically trained through practice, and then later to be taught thoroughly with reason the whole essence of the matter.’²³

His explanation of *Puls.* takes the familiar form of the exegetical act in that he systematically selects *lemmata* from *Puls.* in order to expound upon what was deliberately left out or expressed in a succinct way. Thus, Galen quotes verbatim the aforementioned statement from *Puls.* and then proceeds to describe why this statement is generally true. He then proceeds to give examples of how the amount of differences between men and women may be less or more significant and also how there are exceptions to this rule, where a woman’s pulse may even be greater than a man’s. He moves from generalizations about the differences between male and female animals’ pulses to the subject of why men and women can demonstrate greater and less differences when compared with male and female animals.

²² “Ἀνδρες μὲν γυναικῶν ὡς ἐπίπαν μείζονα πολλῶ καὶ σφοδρότερον ὡσαύτως πολλῶ καὶ βραδύτερον ὀλίγῳ καὶ ἀραιότερον ἰκανῶς ἔχουσι τὸν σφυγμόν. *Puls.*, K. 8.463.14–16.

²³ πᾶν γὰρ ὅσον ἔμελλεν ἀσαφὲς ἔσεσθαι τοῖς ἀρχομένοις τῆς θεωρίας, ἐδόκει χρῆναι παραλιπεῖν. παραλέλειπται δ’ οὐχ ἥκιστα καὶ ὁ τῆς αἰτίας λογισμός. ἄμεινον γὰρ ἦν τοῖς εἰσαγομένοις ἐπ’ αὐτῶν τῶν ἔργων γυμνάσασθαι πρότερον ἐμπειρικῶς, ἔπειθ’ ὕστερον ἅπασαν ἐκδιδασχῆναι τῷ λόγῳ τὴν οὐσίαν τοῦ πράγματος. *Caus.Puls.*, K. 9.106.3–9.

He explains the reason for this by noting how mankind has greater differences in lifestyles, food, environment and temperaments between each other than the animals do.²⁴ Thus, in *Caus.Puls.* the audience is provided with a more detailed and complete account of this phenomenon.

Therefore, in *Puls.*, Galen is dealing with generalities. These generalities supposedly provide certain encouragement and motivation for students to examine the subject more closely, at least that is what Galen claims in *Caus.Puls.* In respect to the aforementioned generalization about men and women's pulses, Galen claims, "'The altogether" (τὸ ἐπίπαν) in the statement is added for the cleverer beginners as a kind of goad, both rousing and urging them toward the inquiry of the whole nature of the problem.'²⁵ Ultimately, Galen has provided a skeleton of pulse doctrines for the beginner to later fill in with experience, reason and his *Treatise on the Pulses*.

III. Genre

To properly contextualize the rhetorical and didactic strategies used in *Puls.*, one must be aware that Galen was one of many authors in the 2nd century AD who wrote introductory works.²⁶ As Galen points out, introductory works were identified with a number of terms such as outline (ὑποτύπωσις), sketch (ὑπογραφή), introduction (εἰσαγωγή), synopsis (σύνοψις) and guide (ὑφήγησις).²⁷ While each of these terms may have had a slightly different connotation depending on the context, Galen indicates that they are all used for writings that aims to provide a simplified treatment of a subject for beginners. In respect to the term εἰσαγωγή, the earliest works that were identified with this term are from the Old Stoa and are linked to Chrysippus.²⁸ The titles of Chrysippus' works seem to suggest that they were introductions to specific subjects, and certainly, later works that use the common titular formula εἰσαγωγή εἰς are usually introductions to a subject rather than a book.²⁹ Nevertheless, the two aims were not far removed from each other. For example, an introductory work such as Alcinous' (c. 1–2nd century AD) διδασκαλικός,³⁰ which is

²⁴ *Caus.Puls.*, K. 9.107–117.5

²⁵ πρόσκειται δὲ τὸ ἐπίπαν ἐν τῇ ῥήσει τοῖς εὐφρεστέροις τῶν εἰσαγομένων οἷον κέντρον τι, διεγείρον τε καὶ παρορμῶν ἐπὶ τὴν ἔρευναν ἀπάσης τοῦ πράγματος τῆς φύσεως. *Caus.Puls.*, K. 9.109.18–110.3.

²⁶ Asper 2007, 214–314. In respect to Galen's introductory writings, see Boudon 1994, 1421–1467; Asper 1996, 331–335.

²⁷ *Lib.Prop.*, Boudon-Millot 2007a, 136.14–16 = K. 19.11; *Syn.Puls.*, K. 9.431.5–432.1; von Staden 1998, 65–94.

²⁸ Diog.Laert., 193.11, 193.13, 195.8, 195.9, 196.6, 196.12, 196.14; Asper 2007, 236.

²⁹ Asper 2007, 236–238; Mansfeld 1994, 197–198.

³⁰ Whittaker 1990, vii–xiii; Dillon 1993, ix–xiii, xiv.

described by Alcinous as being an introduction (πρὸς εἰσαγωγὴν) into maintenance of Plato's dogma (δογματοποιία),³¹ also served as a kind of prolegomena in that it provides a basic understanding of 'Platonic' doctrines for the purpose of studying the Platonic philosophy.³² Although Alcinous' work does not specifically address the contents of individual Platonic works, its purpose is ultimately to assist the student in his study of Plato's writings.³³

In respect to texts identified as εἰσαγωγαί, they addressed a wide variety of subjects, such as philosophy, math, music, medicine and aspects of the Christian faith. Nevertheless, it is difficult to pen down the formal criteria by which an author or reader could claim a text was an εἰσαγωγή because it could appear in a variety of styles and arrangements.³⁴ For example, Ps-Soranus' (c. 2nd–3rd century AD) *problemata* format has little to do with the lecture style of prose used in Galen's *SI*. Furthermore, the term εἰσαγωγή was used to signify both the whole text or merely a part of a text, such as Origen's (AD 184/185–254/255) isagogic discussion of how to pray at the end of his treatise on prayer.³⁵ As to the organizing principles of isagogic works, if one compares the structure of *Puls.* to that of *Oss.*, it becomes quite apparent that the subject matter, rather than the 'genre', determines how the information is arranged in isagogic accounts.³⁶ Furthermore, even when one tries to define these texts by gross stylistic differences, it become apparent that there are introductory texts that do not comfortably fall into such divisions.³⁷

As to an ancient perspective of an εἰσαγωγή as it applies to medicine, a succinct definition can be found in Ps-Soranus' *Quaest.med.*:

What is *isogoga*? *Isagoga* is an introduction to a study by the description of its chief principles (*primarum rationum*) in order to gain an understanding of the medical art.³⁸

³¹ Whittaker 1990, 72.

³² The doctrines put forward in these isagogic texts are an amalgamation of Platonic, Stoic and Peripatetic concepts.

³³ *Plac.Prop.*, Nutton 1999, 54–57.

³⁴ Asper 1996, 309–314.

³⁵ In the last section of his treatise on prayer, Origen breaks from a theoretical discourse into what he describes as being a more isagogic (εἰσαγωγικώτερον) treatment of prayer. He then gives the reader practical information about how to pray describing the proper posture, place, time, direction, words, etc. *De oratione*, 31–34.

³⁶ *Oss.* follows the standard anatomical principle of *a capite ad calcem*, while the sequencing of topics in *Puls.* reflects the manner in which the pulse was taught, such as Marcellinus' *On the Pulses*.

³⁷ Largely, on the basis of orality, Asper breaks up isagogic texts into three groups: Scholische εἰσαγωγαί, Dihäretische εἰσαγωγαί, and what he calls Zwischen- und Sonderformen. Asper 1996, 318–331. Asper places *Puls.* in the category of Dihäretische εἰσαγωγαί with the understanding that *Puls.* is not as formulaic and rigidly systematic as some of the other works in this category. Asper 1996, 332–333.

³⁸ *Quid est isagoga? isagoga est introductio doctrinae cum demonstratione primarum rationum ad medicinae artis conceptionem. Quaest.Med.*, 21; Rose 1870, 251.8f; Asper 2007, 239–240.

The reference to the *primae rationes* illustrates that isagogic writing is perceived as a study of the basic elements of a particular system of knowledge. Thus, the didactic principle, much like today, is to first provide an overview of the principle parts of a subject before conducting a more detailed study. Therefore, the ancient criteria of what constituted an εἰσαγωγή were not derived so much from the formal features of a text as they were from their perceived didactic value: the level of explanation and purpose.³⁹ In general, ancient authors identified a text as being isagogic if the said text was to be read first in a series of texts on the same subject and/or if the information provided by this text was fundamental to progressing toward a fuller understanding of a subject via theory or practice. The general characteristics of this genre can be construed as follows: First, the author of an isagogic discourse assumes the audience is interested in the subject, and therefore, the focus of the work is not to persuade the reader to take up the subject. Secondly, the explicit purpose of an isagogic text is to provide a fundamental understanding of a subject presumably for the audience to build upon. Thirdly, the level of explanation is often limited to defining the principles of a subject in a concise and systematic manner.

Alcinous' διδασκαλικός of the doctrines of Plato provides an example of philosophical isagogic. This text does not make any attempt to convert the reader to taking up philosophy; Alcinous assumes that the reader is a student of philosophy. Alcinous begins by stating that he is writing a διδασκαλία of the dogmas of Plato.⁴⁰ After he defines what a philosopher is and does, he systematically divides 'Platonic' doctrines into the three major areas of philosophy: logic, physics and ethics. He then subdivides these into their component parts, providing a succinct definition of each part and the concepts therein. At the end of this work, he summarizes why he has gone through this process. It is important to remember that Alcinous is a part of a long tradition relaying the 'formalized distillation' of Plato's dialogues in the form of *dogmata*.⁴¹ Thus, Alcinous is not reinventing the wheel; rather, he is providing a condensed and systematic version of the current conceptualizations of Plato's doctrines for the sake of examining the Platonic dialogues.

IV. Author

³⁹ For example, Galen notes how the earliest commentators thought the 'Hippocratic' work *Off.* should be read before all the other Hippocratic texts because its teachings were similar to what later writers called εἰσαγωγή. Galen seems to agree with this interpretation of *Off.* in that he claims *Off.* teaches the most useful matters (τὰ χρησιμώτατα) to those who are beginning to study the art of medicine. *Hipp. Off. Med.*, K. 18b.632.1–14.

⁴⁰ Whitaker 1990, 1–2.

⁴¹ Dillon 1993, xl.

Like Alcinous, we should perceive Galen as an author who has simplified a great body of received doctrines and standardized terminology. However, Galen is not alone in his endeavour to simplify the doctrines of the pulse. *Puls.* appears to be a part of a tradition of providing simplified systematic accounts of pulse doctrines. The *Synopsis of the Pulses* by an anonymous author (c. 3rd century BC–2nd century AD) and Marcellinus' (c. 2nd century AD) *On the Pulses* are two examples of these sorts of introductory texts.⁴² While neither work claims to be written for beginners nor is called an εἰσαγωγή, these texts bear resemblance to *Puls.* in a number of ways. First, the audience is assumed to be interested in the subject and to have a basic level of medical knowledge, which is evident in the kind of medical concepts and terminology used. Secondly, the information is presented without the support of detailed theories, arguments or proofs. Thirdly, they systematically arrange the pulse doctrines in somewhat similar fashion. They begin by defining what the pulse is and where it can be found. Then, they proceed to move through categories of pulse terms, providing succinct definitions for each division and subdivision of pulse terminology. A number of divisions appear in all three works, namely the manifestation of the pulse with specific diseases, different pulse terms and changes in the pulse with age. While there are notable variations as to how many diseases and pulse terms are listed in each work, all three works share a great number of similar pulse terms and include many of the same diseases in their list of pulse types.⁴³ It is quite clear that all three works are pulling from a common tradition of pulse doctrines.

One of the more distinctive differences between *Puls.* and these other two works is the posture Galen takes toward his audience. The other two works are more formulaic and impersonal in their presentation. They do not present their readers with the feeling of being lectured to. Instead, one is left with the impression that these authors are merely reporting doctrines. Hence, we observe both authors giving a brief history of the discovery of the pulse by predecessors before they define the pulse doctrines.⁴⁴ While the *Synopsis of the Pulse* does

⁴² Anonymous, *Synopsis de pulsibus*, Daremberg 1966 (reprint), 219–232, 610–643; Marcellinus, *De pulsibus*, Schöne (ed.) 1907, 455–471.

⁴³ All three texts have a section dedicated to giving a short list of diseases and the changes in the pulse that occur with these diseases. An odd assortment of diseases, such as phrenitis (φρενιτικῶν), lethargy (ληθαργικῶν), pleuritis (πλευριτικῶν), epilepsy (ἐπιληπτικῶν), stomachos (στομαχικός), peripneumonia (περιπνευμονικός) and apoplexy (ἀποπληκτικός), that are found in Marcellinus and *Synopsis de pulsibus* also appear in Galen's list of diseases. *Puls.*, K. 474–492; *Synopsis de pulsibus*, Daremberg 1966 (reprint), 226–228; Marcellinus, *De Pulsibus*, Schöne 1907, l. 278–319. Likewise, one observes in all three works a section on specific terms of pulses, such as the worming (σκωληκίζων), anting (μυρμηκίζων), gazelling (δορκαδίζων) and running back (παλινδρομῶν) pulses. *Puls.*, K. 459–460; *Synopsis de pulsibus*, Daremberg 1966 (reprint), 229–231; Marcellinus, *De Pulsibus*, Schöne 1907, l. 365–494. While there are notable variations in the overall number and how these terms are described, one can observe that all three works attempt to systematize a similar group of specific concepts and terms.

⁴⁴ *Synopsis de pulsibus*, Daremberg 1966 (reprint), 219–221; Marcellinus, *De Pulsibus*, Schöne 1907, l. 1–62.

not extensively cite its sources, it gives little or no indication that the author's understanding of the topic is derived from actual practice. Similarly, Marcellinus generally avoids offering any personal recommendations to the reader. Like the anonymous author of the *Synopsis of the Pulse*, Marcellinus does not have much of a presence in this work, and when he does interject himself into the text, he takes the posture of a reporter of theory rather than a practitioner with his own perspective on the material. Hence, Marcellinus closes his work by claiming he has 'brought together as much as he was able concerning the understanding of the pulse', and that Erasistratus would defend his presentation of this information against future challengers.⁴⁵ These kinds of closing remarks convey that Marcellinus' presentation of the pulse is dependent on the knowledge of his predecessors. This is also borne out in the way he addresses the pulse of fever. Instead of giving his own opinion, he summarizes contemporary doctrines on this pulse, and then he merely relays the *dogmata* of Chrysippus, Erasistratus, Herophilus, Asclepiades, Hippocrates and Archigenes on this topic.⁴⁶ Therefore, both *Synopsis of the Pulses* and Marcellinus' *On the Pulses* give the distinct impression that their doctrines of the pulse are underpinned by tradition and that their authors have no intention of altering or adding to this tradition.

Galen, on the other hand, ignores tradition; instead, he approaches his audience as a teacher rather than a reporter of doctrine. He does this first by having a distinct didactic presence in this text. He uses the first person singular to tell the audience why he thought it best to leave certain information out of his account or to advise the audience to train themselves thoroughly.⁴⁷ His presence as a teacher can also be felt in the way he uses the second person singular to tell the student what he will feel when he attempts to palpate a pulse.⁴⁸ Another way he solidifies his role as the teacher of pulse theory is by remaining silent about the history of pulse theory. Galen simply does not credit anyone else as the source of his knowledge, which in turn, places himself more firmly as the voice of instruction.

Of course, it is not that he makes himself out to be oblivious to all that has transpired before him. He does mention the illustrious Archigenes, but in all three instances, Archigenes' opinion is merely depicted as additional, rather than essential, information about the pulse.⁴⁹

⁴⁵ 'Εφ' ὅσον οὖν ἡμῖν δυνατόν ἦν περὶ τὴν νόησιν τοῦ περὶ σφυγμῶν συντάγματος, ταῦτα συνεισητέγκαμεν. Marcellinus, *De Pulsibus*, Schöne 1907, l. 505–506; 505–510.

⁴⁶ Marcellinus, *De Pulsibus*, Schöne 1907, l. 222–285.

⁴⁷ *Puls.*, K. 8.457, 478.

⁴⁸ For example, in his discussion of the location and movement of the pulse (*Puls.*, K. 8.455–6), he uses the second person singular four times to indicate what the audience will find or sense with palpation.

⁴⁹ His only external point of reference is Archigenes, whom he mentions only in passing. For example, he states, 'Archigenes says that the place of the artery is found to be hotter in these conditions, just as it is for those suffering convulsions with lethargy'. He gives neither an analysis of this comment nor a reference to the text where this can be found; he simply moves on with his account of specific pulses.

Instead of citing other authors and their works, Galen points his reader to his *Treatise on the Pulses*, indicating that it is the appropriate source of pulse doctrines. Thus, Galen projects *Puls.* as an introduction to his own theories on the pulse rather than a work that merely reports the doctrines of others. However, these citations also intimate that Galen does not project his role in the development of students as a ‘hands on’ teacher; rather, he sees his writings as being the appropriate resource for their questions. In other words, he speaks in hypothetical terms when he addresses his ideal audience.

The other way Galen approaches his audience as a teacher is by developing his *ethos* as an expert practitioner of the pulse. One of the clearest examples of this is in the form of a polemical outburst against the majority of physicians (οἱ πολλοὶ τῶν ἰατρῶν) who cast aspersions on what he has written.⁵⁰ While agonistic and polemical remarks are not out of character for Galen, it is somewhat conspicuous considering the genre in which he is writing.⁵¹ His point of contention is that these physicians disregard that there is a nerve-like pulse in pleuritis. He explains that their ignorance of this pulse is caused by their lack of experience which leaves them with an inability to discern difficult pulses. In this way, Galen singles himself out from ‘the majority of physicians’ as an experienced practitioner whose writings are the sources of true knowledge. However, unlike his *Treatise on the Pulses*, where one can perceive Galen’s ‘anxiety’ to influence his audience’s perception of his approach to the pulse,⁵² Galen does not use this as a stepping stone to theoretically demonstrate why his knowledge of nerve-like pulse is superior to all others. Instead, he dismisses any discussion of this matter, claiming that there is no need to go into this further seeing how a discussion can be found in his treatise, *Dig.Puls.* Galen’s reason for avoiding an extensive theoretical demonstration as to why there is a nerve-like pulse reflects his commitment to the didactic aim of the genre in which he is writing. Thus, Galen is far less argumentative in *Puls.* than in his *Treatise on the Pulses* because, for Galen, isagogic discourse should not entail a complex theoretical demonstration. Nevertheless, Galen’s didactic remarks and brief outbursts demonstrate to his audience that he is indeed a teacher–practitioner who is worthy to be read.

The pragmatic and elementary nature of this information on pulses is also conveyed by Galen’s utilitarian approach to syntax in *Puls.* Galen tends to use formulaic phraseology to signal changes in topic. Thus, a change of topic is signalled by placing the subject at the

Ἀρχιγένης δέ φησι τὸν τῆς ἀρτηρίας τόπον ἰδίως ἐπ’ αὐτῶν θερμότερον εὐρίσκεσθαι, καθάπερ τοῖς σπασθησομένοις μετὰ καταφορᾶς. *Puls.*, K. 8.486.1–3.

⁵⁰ *Puls.*, K. 8.477.11–478.2.

⁵¹ One can perceive the impersonal nature of this genre when one compares the frequency of occurrence of the first person singular in *Puls.* to that of the other works analysed in this study: *Lib.Prop.* (2.34%), *Thras.* (1.38%), *Foet.Form.* (1.06%), *Protr.* (0.86%), *HNH* (0.58%) and *Puls.* (0.35%). Appendix C, Table 2.

⁵² Asper 2005, 31–36.

beginning of the introductory sentence. For example, he signals that the following section will be about palpating the vessels by beginning the introductory sentence with Ἀπτομένω...⁵³ Similarly, when he is moving through the different changes in the pulse due to external factors, he signals a change in subject with a prepositional phrase that includes the name of the disease, such as Περὶ δὲ τὰς χώρας and Κατὰ δὲ τὰς ὥρας.⁵⁴ When he moves to his listing of the changes of the pulse according to specific diseases, he signals a new set of pathological pulse signs by using the genitive of the pathology, e.g. Ὑστερικής πνίξεως... and Ἐπιληπτικῶν...⁵⁵

V. Audience

As we have seen, Galen takes on the voice of an instructor, who is informing his student what he will perceive once he begins to train his sense of touch and his rational faculties. But, what kind of beginners does he have in mind as his ideal audience?

His ideal audience does not appear to be complete novices, which is apparent in the assumptions he makes in regard to their medical knowledge.⁵⁶ First, Galen assumes that his audience is able to recognize the location of various internal anatomical structures, such as the spleen (σπλήν), kidney (νεφρός), bladder (κύστις), stomach (γαστήρ), liver (ἥπαρ) and colon (κῶλον). Although this anatomical knowledge would not be beyond a learned audience of laymen, the distinction between arteries, veins and nerves, as well as their relative quantity in various organs, would limit his audience to only those with a keen interest in medical topics.⁵⁷ Secondly, Galen assumes that his audience understands and accepts humoral physiological concepts given that one must comprehend this material in order to understand his remarks on the differences in the pulses between hot- and cold-natured people and the effects of the seasons on the pulse.⁵⁸ Thirdly, he does not devote time to describing the nature and cause of a wide variety of diseases which he includes in this work. Instead, he only tells his audience what the corresponding pulse signs are for diseases, such as elephantiasis (ἐλεφαντιώντων), orthopnea (ὀρθόπνοια) and the suffocation of the womb (ὕστερική πνίξις).⁵⁹ Fourthly, when Galen briefly mentions Archigenes' (AD 98–117) observations of the

⁵³ *Puls.*, K. 8.458.1.

⁵⁴ *Puls.*, K. 8.464.18, 466.3.

⁵⁵ *Puls.*, K. 8.487.5, 487.16.

⁵⁶ Of course, this does not mean that the work was not read by a wider audience of non-practitioners. Nutton 2004, 252–253; van der Eijk 1997, 86–89.

⁵⁷ *Puls.*, K. 8.476.

⁵⁸ *Puls.*, K. 8.463–466.

⁵⁹ *Puls.*, K. 8.477–491.

pulse, he assumes that the audience knows Archigenes' work on the pulse.⁶⁰ However, Galen does not make the same assumptions in regard to pulse terminology because almost all of this terminology is succinctly defined in *Puls.*

Because of the simplification of pulse concepts and his exhortations to gain experience, coupled with the basic medical knowledge Galen assumes of his audience, it is fairly safe to say that Galen's ideal audience consists of medical practitioners and not complete novices to medicine. This interpretation is strengthened by the fact that, as was noted in the introduction to this chapter, the prognostic use of the pulse was not universally practiced among physicians. Knowledge of the pulse was largely determined by what sect one adhered to, the expertise of one's instructor and the availability of books. This picture is reflected in Galen's own life when he claims that for some time he was unsure if the pulse could even be discerned and that he was not clear as to whether the followers of Archigenes and Herophilus were speaking the truth about this subject.⁶¹ Although Galen describes the beginners he writes to as being young men at the beginning of their studies,⁶² it is conceivable that an experienced medical practitioner could be considered a 'beginner' in regard to a specific subject, such as the pulse. It also should be stated that Galen's ideal audience appears to be practitioners within his circle of friends and students because he assumes they recognize his authority on the pulse and they have access to his works. While it is unclear whether Galen wanted this work to be dispersed to a wider audience, he indicates in *Lib.Prop.* that it was read not just by beginners but by his critics as well.⁶³

But, what about Teuthras? As was mentioned earlier, Galen appears to have given *Puls.* to a man named Teuthras. Perhaps this Teuthras is the same man whom Galen describes, in *Ven.Sect.Er.Rom.*, as a fellow citizen of Pergamum and a schoolmate (τις ἐμὸς πολίτης ἄμα καὶ συμφοιτητής).⁶⁴ Galen recounts how this schoolmate had such a good understanding of the Erasistrateans' theories that he was able to convincingly speak against their position on phlebotomy. This same Teuthras, having heard Galen's public speech concerning whether Erasistratus had been right in not using phlebotomy, requested that Galen dictate to a scribe what he had said and give him a copy. If this Teuthras is the same man mentioned at the beginning of *Puls.*, one may suspect that Galen has given *Puls.* to a fellow physician with his own students to teach. While this may be so, *Puls.* clearly was not composed as a teaching manual for Teuthras. Galen never mentions anything about

⁶⁰ *Puls.*, K. 8.469.6–8, 479.17–480.3, 8.486.1–3.

⁶¹ *Dig.Puls.*, K. 8.771.

⁶² *Lib.Prop.*, K. 19.11–12.

⁶³ Galen also appears to be aware of the possibility that *Puls.* may be censured by an unnamed group of critics who had previously attacked his pulse theories. *Lib.Prop.*, K. 19.32–33, *Puls.*, K. 8.477–78.

⁶⁴ *Ven.Sect.Er.Rom.*, K. 11.193–195.

addressing *Puls.* to a teacher named Teuthras in *Lib.Prop.* or *Ord.Lib.Prop.* Instead, we are only told that it was composed for an unnamed group of beginners. The comments in the epistolary proem only signify that *Puls.* was given to Teuthras, which reflects the dedicatory convention found in the other prefatory remarks of many Greek and Latin texts.⁶⁵ As is the case with other works that contain these sorts of dedicatory remarks, the dedicatee is not necessarily the ideal audience of the text.

VI. Use of *Puls.*

Let us turn to the question raised at the beginning: How did Galen intend *Puls.* to be used? The manner in which Galen addresses his audience suggests that *Puls.* was not written as a guide for teachers. Galen does not take the position of an advisor to an equal, which would seem to be the appropriate approach to fellow teachers. Galen assumes that the reader has no experience in taking a pulse. Hence, we observe Galen telling the reader what he will find with experience, which is clearly the voice of an experienced teacher speaking to the inexperienced student. Furthermore, Galen never gives any didactic interjections that tell the reader how to convey what he has taught. Therefore, *Puls.* seems to be written for a student not a teacher.

It is unlikely that *Puls.* was to be consulted like a manual. In other words, it is not the kind of work that a practitioner would consult *ad hoc* or, if you will, *in manu*, because it does not contain the kind of step-by-step information one would need in such situations. Furthermore, Galen claims this work should be read before gaining experience in taking the pulse rather than while someone is gaining experience. Although the material in *Puls.* seems to be brief and general enough for memorization, Galen does not tell the reader to memorize the information nor does he tell the reader to consult it later when he is being trained. In fact, Galen does not tell the reader how to use the work at all, which leaves us to only speculate as to its use.

Much as Alcinous' διδασκαλικός provides its reader with an introduction to Plato's dialogues, *Puls.* is a work that seems to provide an introduction to the theories expressed in Galen's *Treatise on the Pulses*. Hence, in *Puls.*, the audience is introduced to Galen's categorization of changes in the pulse—the natural (κατὰ φύσιν), non-natural (οὐ κατὰ φύσιν) and unnatural (παρὰ φύσιν)—which appears to be Galen's own spin on pulse

⁶⁵ Janson 1964, 7–26.

theory.⁶⁶ Alcinous' introduction is neither a compendium of the Platonic dialogues nor is it of the same nature as Albinus' prolegomena, which gives the reader bibliographical information to the Platonic dialogues, such as information about the nature of dialogues and the appropriate order to read his works.⁶⁷ Rather, Alcinous' διδασκαλικός provides a simplified, yet systematic, presentation of the basic doctrines of Plato. And the benefit of reading such a work is that it allows the reader to easily assimilate Plato's teachings into a schema. Furthermore, from his introduction to the philosophical life, it is clear that the purpose of the διδασκαλικός is to enable the philosophically inclined to grow as a philosopher. Likewise, Galen has written a work that gives the general doctrines that underpin his *Treatise on the Pulses*. This may explain why Galen would give *Puls.* to a dedicatee who already has his *Treatise on the Pulses* and why he points the addressee to his *Treatise on the Pulses*. However, unlike his ἐπιτομή, the purpose of this text is not to remind the reader of the basic contents, principles and arguments contained in his *Treatise on the Pulses*; rather, it is to introduce them to theoretical principles that underpin his *Treatise on the Pulses*.

Nevertheless, *Puls.* is not solely an introduction to his *Treatise on the Pulses*. Galen describes the contents of this work as being for a practitioner rather than a reader who is simply trying to gain theoretical knowledge. In *Puls.*, Galen indicates that he is teaching the basic theoretical principles to facilitate the acquisition of experience as well as theoretical knowledge. *Puls.* is a part of a didactic progression which is as follows: basic doctrine informs experience, and experience informs theoretical inquiry. Hence, *Puls.*'s usefulness lies in the fact that it facilitates the acquisition of knowledge by providing a skeleton of doctrines which is to be fleshed out later with experience, theoretical inquiry and Galen's *Treatise on the Pulses*.

⁶⁶ *Puls.*, K. 8.462–473; Bylebyl 1971; Niebyl 1971; García-Ballester 1993.

⁶⁷ Alcinous and Albinus were long thought to be the same author. This belief has fallen out of favour and now they are viewed as two separate authors of the 2nd century AD. Göransson 1995, 34–77, 105–132; Whittaker 1990, viii–xiii; Dillon 1993, ix–xiii.

Scientific Treatise:

Πραγματεῖαι and *De Foetuum Formatione*

I. Introduction

We now move to texts which are described by Galen as πραγματεῖαι. The text that will be our example of a πραγματεία is a work entitled περὶ κνουμένων διαπλάσεως (*Foet.Form.*).¹ *Foet.Form.* was written during the latter part of Galen's career, sometime after AD 193.² Although the construction of the embryo was a recurring topic in many of his works, *Foet.Form.* is the only extant text which is wholly devoted to this subject.³ The formation of the embryo was a topic of interest, albeit for different reasons, among physicians and philosophers from the 5th century BC onward.⁴

Galen's explicit purpose in writing this work was to give an account, which is based on anatomical observations, of the construction (διάπλασις) of the human body in the womb.⁵ In his account, he takes up an argument against physicians and philosophers who rely on conjecture, rather than anatomical evidence, when discussing the formation of the embryo. The main focus of his criticisms is directed toward philosophers, primarily Stoics,⁶ who claim that the heart is in charge of formation and management (διοίκησις) of the other parts of the body. Galen argues that, because of their disregard for anatomy, philosophers and physicians have made unsubstantiated claims concerning the location of the deliberative part of the soul and the αἴτιον of the construction of the embryo. While anatomy and physiology serve as the

¹ The Greek text for *Foet.Form.* is from Nickel 2001, which will appear as N. from here on. For the sake of consistency, the term 'embryo' will be used in this work with the understanding that at different stages in the development of the κνούμενον, it is identified with different terms in ancient medicine. *Sem.*, de Lacy 1992, 92–94 = K. 4.542–544. 'Embryo' seems to be the appropriate term in that it captures the period of development which Galen focuses on with this work, as well as being the terminology he uses in this text (ἔμβρυον). *Foet.Form.*, N. 54.9–10, 92.16 = K. 4.653, 688.

In *Foet.Form.*, Galen identifies what he is writing as a πραγματεία, and he also calls another of his works a πραγματεία, i.e. περὶ τῆς τῶν εἰδῶν ψυχῆς. *Foet.Form.*, N. 90.27–28, 106.8–13 = K. 4.687. He also identifies *Foet.Form.* as a λόγος and a γράμμα. *Foet.Form.*, N. 78.33, 92.21–22, 94.6–7 = K. 4.675, 688, 689. In *Prop.Plac.*, which is the only text that refers to *Foet.Form.*, Galen seems to have used λόγος to refer to *Foet.Form.* because the Latin translation of *Prop.Plac.* uses *dictio: et narravi hoc in dictione quam scripsi de formatione embrionis*. *Prop.Plac.*, Nutton 1999, 62.11–12.

² Ilberg 1892, 510–511; Singer 1997, ii; Nickel 2001, 42–44; *Prop.Plac.*, Nutton 1999, 62.11–12. His state of ἀπορία in *Foet.Form.*, in regard to the identity of δημιουργός in the construction of the embryo, resonates with views expressed in *Prop.Plac.*, Nutton 1999, 92.12–94.17. Therefore, it seems likely that these two works were written during the same period of time.

³ Nickel 1989; 2001, 42–43.

⁴ An overview of ancient approaches to this subject can be found in Congourdeau 2007. See also Parker 1999.

⁵ *Foet.Form.*, N. 54.3–5 = K. 4.652. Here, I follow Singer's title for this work because it captures the dual sense of διάπλασις, which can infer a 'high-level structure' or a process of 'shaping'. Singer 1997, 421, n. 177.

⁶ As to Galen's adversarial relationship to Stoics in this work, see Nickel 1993; Gill 2007, 97, 105–107. cf. Manuli 1993.

basis for Galen's arguments, the subject matter is ultimately linked to philosophical discourses on the relationship of the *psyche* to the *soma*.⁷

The contents of *Foet.Form.* are as follows:⁸ Galen begins (Chap. 1) by criticizing philosophers and physicians, who have ignored the writings of anatomists, when these groups attempt to write about the construction of the embryo. He goes on to say that Hippocrates was the first to give a truthful anatomical account of the embryo. He then (Chap. 2) describes the external and internal anatomy of the embryo in its initial stage of development, i.e. a six-day-old embryo. Next (Chap. 3), he takes up a discussion of the changes in the anatomy of the embryo during successive stages of its development. He then (Chap. 4) censures Stoic and Peripatetic theories, which put forward that the heart was formed first and that it formed the other parts of the body as well as managed them. He supports his criticisms (Chap. 5) using physiological evidence refuting these cardio-centric theories. He then (Chap. 6) turns to the question of the αἴτιον of the construction of the embryo. Here, he recognizes that the complex and purposeful design of the body necessitates that an intelligent and powerful craftsman is involved. However, he confesses that he is in a state of ἀπορία as to the identity and nature of this craftsman based on what he perceives to be truly, epistemologically secure evidence, i.e. anatomical as well as geometrical proofs.

One of the reasons for selecting this text is because it exemplifies an important type of discourse in scientific communication: the refutation of theories or claims to scientific knowledge (ἐπιστήμη). On the one hand, scientific refutation is about progress, in that old theories often must be undermined in order for a new theory to be advanced. On the other hand, when the refutation attempts to censure a new theory, scientific refutation serves the purpose of the conservation of knowledge.

The history of science is full of great controversies and disputes between members and/or groups within the scientific community. The participants, audience, setting, medium and socio-scientific perspective of the subject determine how such disputes are conducted, as well as their outcomes. To recognize the profound effect that these factors have on the way scientific refutation is carried out, one needs only to compare the rhetorical strategies used in the oral debate between Harlow Shapley and Heber Curtis over the scale of the universe with

⁷ This text's connection with issues concerning the *psyche/soma* relationship is quite evident in whom Galen chooses as his opponents, the topics he chooses and the Galenic texts to which he refers his audience, such as *PHP*, *QAM*, as well as the no longer extant treatise entitled Περὶ τῶν τῆς ψυχῆς εἰδῶν. *Foet.Form.*, N. 78.10, 82.19, 106.7–10 = K. 4.674, 679, 701. Collections of works that provide a survey of the approaches to *psyche/soma* relationship in philosophy and medicine can be found in King 2006; Wright and Potter 2000.

⁸ An analytical outline can be found in Appendix B.

those observed in Galileo's *De Motu* (1590) and *Il Saggiatore* (1623).⁹ Many ancient scientific works such as Aristotle's *De generatione et corruptione* and 'Hippocrates'' *Nat.Hom.* promote their position by undermining competing explanations of predecessors and contemporaries. While there is little doubt that Galen's authorial persona was disputatious and, at times, belligerent, Galen's refutations of his contemporaries' and predecessors' theories should not be perceived only as personal polemics. Galen is part of a scientific culture where self-presentation and competition with one's peers are important elements in establishing the veracity of one's claims. Galen's espoused approach toward his predecessors and contemporaries reveals an author-scientist who is deeply concerned with verifying and refuting the claims of others through scientific demonstration. His criticisms of theories and theorists were likely to be seen as exemplifying a serious commitment to scientific knowledge.¹⁰

Among the types of writings that philosophers and physicians used to put forward their theoretical positions, the detailed and systematic works which they associated with the term *πραγματεῖαι*, are those that were commonly taken to task by rivals and promoted by adherents. This rhetorical analysis of *Foet.Form.* will provide a window into the ways in which scientific knowledge was progressed in 2nd century AD. The following questions will be considered: What posture does Galen assume toward members of the scientific community on this subject, and how does this affect his message? What posture does he take toward the audience? Who is the ideal audience of this work? What organizing principle does he choose to structure his message? How does his presentation of his opposition's position contribute to the persuasiveness of his argument? What types of evidence and theoretical explanations does he use to support his position? How does he validate his arguments and evidences? Is there a recognizable decorum to this type of discourse?

II. Genre

In *Foet.Form.*, Galen states that his arguments in this work aim for the 'utmost detail' (*εἰς ἐσχάτην ἀκρίβειαν*).¹¹ Likewise, in *Lib.Prop.* and elsewhere, Galen describes writing works that were designed to provide a full (*ὅλον/τελεῖον*) and detailed

⁹ *De Motus* and *Il Saggiatore*, Favaro 1890–1909. English translations can be found in Drabkin 1960; Drake 1960. For secondary literature on the reception and rhetoric of Galileo's treatises, see Machamar 1991; Palerino and Thijssen 2004. Transcripts of the proceedings of the 1920 debate over the scale of the universe can be found in Curtis 1921; Shapley 1921. For analysis of the debate, see Smith 1982.

¹⁰ Galen's position on scientific progress is treated in Hankinson 1994.

¹¹ *Foet.Form.*, N. 68.17–20 = K. 4.665–666.

(διηκριβωμένον/ἀκριβές) account of a subject. As was pointed out in the chapter on isagogic writing, Galen often links these works to audiences who are experienced (via training and logic) and, therefore, ready for such theoretical explanations.¹² The characteristic aim of these texts is that of examination/inquiry, which is evident in Galen's repeated use of the verbs σκέπτειν and ζητεῖν and their derivatives to denote the action or the object of the action in these texts.

The texts that will be addressed as scientific treatises should be distinguished from theses for a number of reasons. While both are forms of scientific inquiry, a thesis is bound to answering a single posed question (πρόβλημα), which is explored by 'the method of *in utramque partem*, of confirmation and refutation (κατασκευή, ἀνασκευή)'.¹³ And, as was noted in the chapter on the thesis, the genre of the philosophical thesis is intimately linked with dialectical argumentation. Thus, an author who writes in this genre sometimes conveys the presence of an interlocutor and the process of discovery.

One often finds theses within treatises. Treatises are often substantially longer than theses, and in the Galenic Corpus, they incorporate different genres of writing, such as commentary, diatribes and descriptive narratives as well as paratextual features, such as tables, prefatory remarks and books. With that being said, there is such a wide variation in the kinds of subjects (technical/philosophical), structure (integrative argument/diairetic or stochastic series topics), refinement (smooth, flowing sentences/series of terse, incoherent clauses), audiences (individual/collectives), tone (polemical/arid), aims (to censure/to instruct) and contexts (texts derived from a public speech/texts that are a disclosure of personal research) of these works in the Galenic Corpus, let alone among other ancient authors of scientific prose, that it is difficult to give any authoritative definition as to the formal characteristics of a scientific treatise.¹⁴ A scientific treatise, as defined in this study, is a written work which provides a detailed treatment of a subject by linking a series of related topics together using a variety of different types of discourse to convey its message.¹⁵ The aforementioned definition of a scientific treatise serves as one of the guides for the selection of our text for rhetorical analysis.

¹² *Puls.*, K. 8.460.10–461.5; *Lib.Prop.*, Boudon-Millot 2007, 136.4–137.22 = K. 10.14–13.1. In his examination of a variety of texts that offer complete treatments of a subject, it emerges that these texts engage in different types of theoretical causal explanations, which are largely subject-determined. Singer 1997.

¹³ Schenkeveld 1997, 247.

¹⁴ Lengen's treatment of some of the *pragmateiai* in Aristotle's oeuvre reveals the diverse formal features of ancient treatises. Lengen 2002.

¹⁵ The kinds of texts that Galen places in this broad category are often identified by scholars as 'scientific treatises' for lack of a better term. In some respects, this modern term is acceptable in that it conveys the kind of systematic and formal treatment of a subject that some Galenic texts exhibit. However, the term is applied so liberally to ancient scientific texts that it does not truly signify a genre. Nevertheless, it will be used in this chapter for the sake of convention and with the aforementioned definition in mind.

Our selection of a suitable artefact for analysis is complicated by the fact that ancient titles of texts often give little indication as to the genre of the text.¹⁶ The polysemic nature of the ancient terms that are commonly associated with scientific treatises, such as σύγγραμμα, ὑπόμνημα and πραγματεία, also creates problems. For example, a σύγγραμμα can mean a ‘regulation’, ‘written form’, ‘writing’, ‘book’ or ‘treatise’ depending on the author and the situation.¹⁷ Furthermore, Galen, like other ancient authors, has a tendency to identify his own texts in an imprecise way by using a variety of different ‘genre’ terms to refer to a single text,¹⁸ all of which leaves us often to speculate as to what Galen is trying to imply about a text in which he uses such descriptors.¹⁹ When applied to the sorts of works I have described, each term provides a slightly different nuance of meaning. In *Ars Med.*, Galen refers to his collective body of writings as ὑπομνήματα and συγγράμματα.²⁰ The distinction Galen seems to be signalling here largely has to do with the different ways in which these texts were produced and their level of refinement. As was discussed in the chapter on *HNH*, ὑπομνήματα are to be associated with ‘memoranda’ or ‘notes’ that one puts together on a subject or in the study of a book.²¹ Thus, Galen sometimes uses ὑπομνήματα to indicate that the work was less refined, and therefore, it was not meant to be given out (πρὸς ἑκδοσιν) to those outside his circle.²² A σύγγραμμα is defined by Galen as a written composition that has a proposed subject (τὸ ἐπαγγελθέν), which it brings to completion (συντελεῖσται).²³ In *Lib.Prop.* and *Ord.Lib.Prop.*, Galen uses σύγγραμμα only to refer to Hippocratic texts.²⁴

In the case of the term used in this study, a πραγματεία can be used to indicate an ‘occupation’, ‘a diligent study’ or a ‘treatment of a subject’.²⁵ Under the last connotation, one finds its association with a ‘philosophical arguments/topic’ or ‘systematic work’, such as a ‘scientific historical treatise’.²⁶ In some respects, πραγματεία is a noun which, like treatise (a term ultimately derived from the Latin *tractare*), is a derivative of a verb signifying the handling or managing of some affair or business, i.e. a πράγμα. In *Ord.Lib.Prop.* and *Lib.Prop.*, the term is often used by Galen to identify voluminous works that present an overall subject matter, which includes works written by Galen (e.g. his aforementioned 16-

¹⁶ Schenkeveld 1997, 255–263.

¹⁷ See *LSJ* entry.

¹⁸ von Staden 1998.

¹⁹ See *LSJ* entry.

²⁰ *Ars Med.*, Boudon 2002, 392.13 = K. 411.17.

²¹ In the case of ὑπόμνημα, Galen sometimes uses it to indicate a systematic treatise, books within a treatise, a complete commentary or a special part of a book. von Staden 1998, 72–73.

²² von Staden 2006, 23–24. See also Jenner 1989, 65–66. *Lib.Prop.*, K 19.8–11.

²³ *HNH* and *Hipp. Vict.*, Mewaldt 1914, 76.6–15, 89.3–14.

²⁴ *Lib.Prop.*, Boudon-Millot 2007a, 159.11, 161.18 = K. 19.33.17, 19.36.15; *Ord.Lib.Prop.*, Boudon-Millot 2007a, 98.7 = K. 19.57.6.

²⁵ See *LSJ* entry.

²⁶ See *LSJ* entry.

book treatment of pulses entitled ἡ περὶ τῶν σφυγμῶν πραγματεία) or other notable philosophical and medical figures, such as Aristotle, Erasistratus, Marinus and Archigenes.²⁷

In a letter preserved by Diogenes Laertius, we observe how Epicurus' writings on φύσις are identified as a πραγματεία.²⁸ The letter describes Epicurus' writings as a ὅλη πραγματεία which requires an ἐπιτομή to assist the student in the study of what Epicurus has worked out in detail (ἐξακριβοῦν) in his 'treatise'.²⁹ Thus, similarly to Galen, 'Epicurus' associates the term πραγματεία with a detailed and complete treatment of a subject. And, as Galen's ἡ περὶ τῶν σφυγμῶν πραγματεία required an epitome (*Syn.Puls.*), Epicurus' πραγματεία was the kind of complete and detailed account of a subject that required an epitome to make the information accessible. Thus, a complete and accurate account of a topic, depending on the subject matter, could become an author's *magnum opus*.

III. Audience

3.1 Audience-orientedness

The question of audience-orientedness in *Foet.Form.* is complicated by the fact that Galen makes no explicit claims in this work about its intended audience. There is no addressee or dedicatee. Likewise, there is no discussion as to the rhetorical situation that brought about this text. He does not assert that he is responding to a question posed by a student, as is the case in *Thras.* and *CAM*, nor does he put forward that the work is composed to meet the needs of a particular group or at the request of one of his friends/students, as is the case in *Puls.* and *HNH*. Furthermore, none of his other works describe the audience or the rhetorical situation of *Foet.Form.*

There is one passage in *Foet.Form.* that has been read as indicating Galen's 'intended audience'.³⁰ The passage in question is as follows: 'But the first [of the two premises] I do not need to refute since it is held in contempt by the men whom my account is particularly against (πρὸς οὓς ὁ λόγος ἐστὶ μοι μάλιστα)'.³¹ While πρὸς οὓς could mean 'to whom', it is best to take the phrase πρὸς οὓς to mean 'against whom' because Galen often use πρὸς 'X' to indicate whom he is censuring. This interpretation is supported by the context of the passage

²⁷ *Lib.Prop.*, K. 19.20.1, 19.20.10, 19.28.21, 19.30.12, 19.31.3, 19.32.5, 19.33.12, 19.37.16, 19.41.11; *Ord.Lib.Prop.*, K. 19.55.15, 19.56.6, 19.56.18

²⁸ *Diog.Laert.*, 10.82–83.

²⁹ *Diog.Laert.*, 10.82–83, 10.35.

³⁰ In his notes, Singer suggests that Galen's 'intended audience' for *Foet.Form.* was the Stoics. This perspective is also reflected in his translation of πρὸς οὓς ὁ λόγος ἐστὶ μοι μάλιστα as 'to whom the present work is chiefly addressed'. Singer 1997, 195, 423, n. 195.

³¹ 'Ἀλλὰ τὸ μὲν πρότερον ἐλέγχειν οὐ χρήζω κατεγνωσμένον ὑπὸ τῶν ἀνθρώπων, πρὸς οὓς ὁ λόγος ἐστὶ μοι μάλιστα'. *Foet.Form.*, N. 92.22–23 = K. 4.688.

because, at this juncture, he is explicitly criticizing the Stoic position on the cause of the formation of the embryo. Hence, these philosophers cannot be called the ‘intended audience’ any more than Lycus of Macedon and Julian the Methodist should be considered the intended audiences for Galen’s polemics, *Πρὸς Λύκον* or *Πρὸς Ἰουλιανόν*. Galen is merely signalling to his audience the group whose theoretical position he is challenging at this point of his discussion.

Let us turn to some of the internal indicators of the intended audience of this work. Via the previous passage, as well as others, Galen indicates that he wrote *Foet.Form.* to refute the cardio-centric positions of philosophers and physicians on the *διάπλασις* of the embryo.³² He points out that these men have fallen into error primarily because they have disregarded anatomy as the proper source of the premisses (λήμματα) of their proofs (ἀποδείξεις).³³ By censuring these men’s ἀποδείξεις, he emphasizes that he is attacking the logic behind their claims. Hence, he makes it quite clear that this work’s arguments are to be assessed in the context of what Galen perceived to be ‘scientific proofs’.³⁴

Another potential internal indicator of his audience is his use of anatomical evidence. In Chapters 2 and 3, Galen gives a detailed anatomical account of the formation of the embryo.³⁵ While the terminology and the level of detail in this account far exceeded the knowledge of non-specialists, a point I will come back to later, Galen’s anatomical account should not be taken as an indication that he is only writing to anatomists and physicians.³⁶ It only indicates that he assumed the audience understood how this information should be presented and that they would consider it a compelling form of ἐπιστήμη, which appears to be the case among philosophers, physicians and learned élites.³⁷ Furthermore, statements, such as ‘The anatomists have given names to these two membranes’ (ὀνόματα δὲ τοῖς δυοῖς

³² *Foet.Form.*, N. 54.3–8, 78.32–80.3, 80.14–20, 90.27–92.3, 102.10–21 = K. 4.652–653, 675, 676–677, 687, 698.

³³ *Sem.*, de Lacy 1992, 4–14, Sextus Empiricus, *Pyrr.Hyp.*, 2.134–143; Tieleman 1996, 12–23. cf. Ebert 1993.

³⁴ *PHP*, de Lacy 1978, 102.17–117.31; Tieleman 1996, 12–23.

³⁵ Anatomical terms, such as χόριον (N. 66.5 = K. 4.662), ἀμνιός (N. 60.14 = K. 4.657), οὐραχός (N. 60.9 = K. 4.657) and μεσεντέριον (N. 64.9 = K. 4.661), are the kind of technical terms that Galen uses in this work. It should be noted that anatomical terms, such as χόριον and μεσεντέριον, also appear in Julius Pollux’s *Onomasticon*, which is a kind of lexicon dedicated to Commodus (*On.* 2.223.3, 2.223.6, 2.211.2, 2.225.3). The source of Pollux’s anatomical terminology appears to be from Rufus of Ephesus’ *On the Names of the Parts of the Body*.

³⁶ van der Eijk 1997, 86–89.

³⁷ Nutton argues that ‘anatomy was already in vogue in Rome when Galen arrived there in AD 162 and that Galen’s anatomical writings and displays were not novelties but ‘allow us to situate him within developments already begun rather than instituted solely by him’. Nutton 2004, 213–215. While not all philosophers and physicians agreed as to the epistemic value of anatomical knowledge, it seems that anatomy was held in a high regard. Even Soranus, who claims that anatomy is ἄχρηστος to medical practice, nevertheless feels compelled to address the topic if only to show that he is aware of the discoveries made via anatomy. Sor. *Gyn.*, Ilberg 1927, 1.5.

τούτοις ὑμέσιν οἱ ἀνατομικοὶ τέθεινται),³⁸ do not imply that the audience was versed in anatomy. And, when he states that ‘now long and consistent clinical experience has moved doctors universally to share the opinion of anatomists’,³⁹ one gets the impression that his audience extends beyond physicians to embrace a public who were aware of the language and concepts of anatomy and physiology but whose interest was in the subject and not necessarily in anatomy.

Although Galen professes that this topic is important to medicine,⁴⁰ there is no concerted effort to discuss its medical applications.⁴¹ *Foet.Form.*’s primary focus is how anatomy can be applied to theoretical questions about the embryo. The questions that he brings up in this work, such as What is formed first in the embryo?; When does the embryo move from plant-like to animal-like function?; How do the vessels branch from the heart?; How is the embryo nourished?; and What is the cause of the formation of the embryo?, are common topics of philosophical inquiries on the soul.⁴² This, coupled with the fact that he often appears to assume that his audience does not know what medicine or anatomists have discovered, again indicates that he has not strictly oriented this work toward practitioners of medicine.⁴³

That said, a theoretical account of the soul and the formation of the embryo should not be limited to only philosophers, since contemporary medical authors, such as Soranus, express an interest in speaking about the faculties, locus and nature of the soul.⁴⁴ The so-called ‘high-medicine’ of the 2nd century AD often demonstrates its close ties with philosophy, which can

³⁸ *Foet.Form.*, N. 60.12–13 = K. 4.657.

³⁹ ἤδη δ’ ἐκ πολλοῦ τοῖς τ’ ἀνατομικοῖς ὡμολογημένης ταύτης τῶν τε παθῶν τῆς ἰάσεως ἐκ πολυχρονίου τε καὶ συμφώνου πείρας ἅπασιν τοῖς ἰατροῖς.... *Foet.Form.*, N. 80.29–31 = K. 4.677.

⁴⁰ Galen claims that the topic is χρήσιμον to physicians in that they are able to recognize, in cases of paralysis or problems with perception, which parts are endowed with sensation and how the brain and nerves are involved. However, other than this, he does not discuss the medical uses of the topics presented in this work. *Foet.Form.*, N. 78.32–80.13 = K. 4.675–676.

⁴¹ There were certainly other medical ways in which the topic of embryonic anatomy could be addressed. For instance, in his gynecological treatise, Soranus (AD 98–138) provided a section on the description of fetal anatomy. In this treatise, Soranus poses the question, ‘What grows inside the uterus of the pregnant woman (Τίνα κυούσης τῆς γυναικὸς ἐντὸς τῆς μήτρας φύονται)?’, to which he gives a fairly detailed anatomical account of the anatomy of the embryo, which he links to the practical concerns of the rupture of the membranes and pregnancy. Sor., *Gyn.*, Ilberg 1927, 1.57–59. While the topic of the soul and the formation of the embryo does occur in Soranus’ gynecological treatise (Sor., *Gyn.*, Ilberg 1927, 1.36–41, 43–44), it is not the primary question, and it is subsumed in a broader discussion of conception. Other examples of ‘medical’ discussions of the development of embryo/fetus can be found in the Greek embryological calendars, which attempt to offer practical advice in regard to the delivery of a viable child. Parker 1999.

⁴² *Foet.Form.*, N. 68.17–70.11, 74.3–18, 76.10–19, 84.25–86.7, 90.27–106.13 = K. 4.665–666, 670, 672, 681, 687–702. cf. Pseudo-Plutarchus’ *Placita philosophorum*, 907c–908c; Alcinoüs, *Introductio in Platonem*, 17, 23, 24, 25; Alexander of Aphrodisias, *De anima*, 94.7–100.17.

⁴³ *Foet.Form.*, N. 80.26–82.4, 96.29–98.6 = K. 4.677, 693.

⁴⁴ Soranus addressed the subject of the soul in the four books of a work entitled Περὶ ψυχῆς, of which Tertullian seems to have made use when he wrote his treatise on the soul. Soranus also appears to have written works dedicated to the topic of the seed and generation, respectively. Hanson and Green 1994, 1006–1007, 1031–1033. Earlier medical precedents for these psyche-soma discussions can be found in the ‘Hippocratic’ works of *Cord.* and *Morb.Sacr.* See also von Staden 2000.

be seen in its shared epistemic concerns and the subject matters.⁴⁵ The relationship between philosophers and physicians is historically so intertwined, especially when it comes to the matters of causality and natural philosophy, that it is often difficult to determine which subjects are clearly medical and which are clearly philosophical. On the one hand, we have the great 2nd century AD commentator and teacher of Aristotelian philosophy, Alexander of Aphrodisias, writing pieces on rather ‘medical’ topics, such as *De febribus* and *De mixtione*.⁴⁶ And, on the other hand, we have Galen and Soranus both writing works on the soul. In addition to the sharing of subject matters, the origins of physicians’ epistemic approaches were often associated with different philosophical schools or beliefs.⁴⁷ Thus, both philosophers and physicians took into consideration each other’s views on a subject as they related to nature and the human body.

3.2 Presence of the audience

Let us now turn to the question of what kind of presence and role does Galen give the audience in this work. Unlike *Thras.*, the audience/addressee, as represented by Galen’s use of the vocative or second person singular/plural, has almost no presence in this work.⁴⁸ He only uses the second person once. It occurs in the optative form of the second person singular of εὐρίσκειν.⁴⁹ This one instance, however, does not seem to indicate that he is writing to a specific individual. It is merely a formulaic way of demonstrating what the audience would find if they had any significant experience in anatomical dissections, i.e. an unspecified ‘you’ = ‘one’. As in *Thras.*, Galen uses third person imperatives and first person plurals to mark transitions in his arguments. For example, having given a description of the anatomy of an embryo in its early stages, he declares:

Let this be submitted (ὑποβεβλήσθω) for us as a kind of foundation (θεμέλια) for the statement which will follow. Let us examine closely (σκοπώμεθα) the subject of how it appears that the whole subsequent formation of the embryo is from the faculty of the sperm taking again the beginning (ἀρχὴν) of our inquiry (εὐρέσεως) from the observations of anatomy.⁵⁰

⁴⁵ The distinction between ‘high’ and ‘low’ medicine is made in Riddle 1993.

⁴⁶ In addition to philosophical treatises, the topic of the cause of disease was a part of an introduction to Platonic philosophy in the 2nd century AD. Alcinoüs, *Introductio in Platonem*, 22.

⁴⁷ Sextus Empiricus’ and Galen’s discourses on medical sects often linked these sects’ origins to philosophers and philosophical collectives. Frede and Walzer 1985, ix–xxxiv; Allen 1993; Hankinson 1998, 7–48.

⁴⁸ Appendix C, Table 2.

⁴⁹ *Foet. Form.*, N. 98.11 = K. 4.694.

⁵⁰ ταυτὶ μὲν ἡμῖν οἷον θεμέλια τῶν ἐφεξῆς εἰρησομένων ὑποβεβλήσθω. σκοπώμεθα δ’ ἐπ’ αὐτοῖς, ὅπως εἰκὸς ἔστι τὸ κυούμενον ὑπὸ τῆς κατὰ τὸ σπέρμα δυνάμεως ἅπαν ἐφεξῆς διαπλασθῆναι, τὴν ἀρχὴν τῆς

Here, he uses the third person imperative of ὑποβάλλειν to indicate that he is submitting his anatomical observations as a type of logical premise of a starting point for the following investigation. This type of language, which appeals to the reader's sense of logic, is also echoed in other parts of this work.⁵¹ Likewise, he uses the third person imperative to advance his argument and to convey that he is demonstrating his answer through a logical method. In this way, he seems to acknowledge the audience's ability to assess his arguments at a theoretical level of logical proofs.

His use of the first person plural in this passage indicates that the audience is to examine the logical progression of his arguments. His use of this first person plural conveys a sense of orality to this work. Thus, we observe Galen addressing the audience with the statement, 'we will remind ourselves' (ἀναμνήσομεν ἡμᾶς αὐτοὺς), before entering into a discussion of the topic of the formation and management of plants.⁵² In this way, Galen's use of the first person plural in these instances is nothing more than a rhetorical 'we' used to mark off an important transition or argument in this account.

3.3 Auto-references and the ideal audience

In the Galenic Corpus, when he refers to his own works, Galen should be seen as projecting the idea that his ideal audience is part of his circle of friends/students. In *Foet.Form.*, Galen's self-references are used primarily for advancing his arguments.⁵³ He uses them to avoid repeating or going into too much detail concerning a topic that he feels he has already addressed elsewhere. Hence, by simply referring his ideal audience to another one of his works, he frees himself to move on to other topics. For example, he states, 'This account [i.e. *Foet.Form.*] requires certain distinctions which have been fully (ἐπὶ πλέον) addressed in the treatise (ὑπομνήμασιν) *On the Doctrines of Hippocrates and Plato* and the necessary matters (ἀναγκαίων ὄντων) have been selected here in summary (ἐν κεφαλαίοις).'⁵⁴ These kinds of statements serve an important didactic function because they indicate how this particular written discourse is related to previous ones.⁵⁵ What is curious about Galen's use of these kinds of auto-references in *Foet.Form.* is that he does not employ the second person to

εὐρέσεως αὐτῆς ἀπὸ τῶν κατὰ τὰς ἀνατομὰς ὁρωμένων ποιησάμενοι. *Foet.Form.*, N. 62.23–27 = K. 4.660.

⁵¹ *Foet.Form.*, N. 68.24, 94.7 = K. 4.666, 689.

⁵² *Foet.Form.*, N. 68.20 = K. 4.665.

⁵³ Aristotle also refers his audience to his own writings in order to move his argument along. For example, in *Resp.*, he refers to *de An.* (474.b.10–11), *HA* (477.a.1–7, 478.b.25–29).

⁵⁴ διορισμῶν δὲ τινῶν ὁ λόγος οὗτος χρήξει λελεγμένων μὲν ἐπὶ πλέον ἐν τοῖς Περὶ τῶν Ἱπποκράτους καὶ Πλάτωνος δογμάτων ὑπομνήμασιν, ἐν κεφαλαίοις δὲ καὶ νῦν ἀναγκαίων ὄντων λεχθῆναι. *Foet.Form.*, N. 82.18–20 = K. 4.679.

⁵⁵ This type of didactic progression can be found in the Aristotelian Corpus in works, such as *GA*, which list at the beginning what has been previously covered to explain why and how he can proceed to the next subject matter. *GA* 715a.

intimate that he is writing to friends/students.⁵⁶ Such auto-references indicate that the ideal audience is assumed to be familiar with and have access to his texts. However, there is no intrinsic or extrinsic evidence that this work is a continuation of a previous lecture or a text that is designed to fit in a series of lectures. In other words, we should not view the ideal audience as being students who are attending Galen's lectures on a subject.

Although Galen mentions various works that contain subject matter being addressed in *Foet.Form.*, these remarks signify only a topical, rather than a didactic, link. Some of the other Galenic works mentioned in *Foet.Form.* are too chronologically removed to suggest that this work represents a didactic progression for a school of students. Rather, *Foet.Form.* represents Galen's exposition on a subject of current interest to him. This can be perceived from Galen's discussion of *Sem.* in *Foet.Form.*⁵⁷ He states that, when he was writing *Sem.*, he described the chronological order of the formation of the embryo, noting that the heart and liver were formed in the first few days of conception.⁵⁸ He then claims that he needed to address this again, remarking that because the embryo is initially like a plant, it is more plausible that the heart serves no role in the initial stages of the embryo and is formed after the liver.⁵⁹ Thus, in *Foet.Form.* Galen is attempting to clarify his theoretical position on the heart in the formation of the embryo.

IV. Author

4.1 Galen's portrayal of his scientific community

On particular topics or fields of study, the ways in which both ancient physicians and philosophers advanced their competing scientific explanations reveal, in the broadest sense, a 'discourse community'—one that spans time, profession and geography via the written word.⁶⁰ Galen situates his exposition of this subject within a scientific community of men who wrote *περὶ τῆς τῶν κυουμένων διαπλάσεως*.⁶¹ At the outset of the work, he lists three groups of specialists who addressed this topic: physicians (ἰατροί), philosophers

⁵⁶ Appendix C, Table 2.

⁵⁷ *Foet.Form.*, N. 66.19–32 = K. 4.663–664.

⁵⁸ *Sem.*, de Lacy 1992, 92.3–104.12.

⁵⁹ cf. *De propriis placitis*, Nutton 1999, 91.18–94.17, 177–179.

⁶⁰ p. 12, n. 25.

⁶¹ He notes, at the beginning of this work, that 'both physicians and philosophers have attempted to write about the construction of embryos without holding anatomy as a starting point for their discourse'. *Περὶ τῆς τῶν κυουμένων διαπλάσεως ἐπεχείρησαν μὲν ἰατροὶ τε καὶ φιλόσοφοι γράφειν μηδεμίαν ἀφορμὴν ὧν λέγουσιν ἐξ ἀνατομῆς παρεχόμενοι*. *Foet.Form.*, N. 54.3–8 = K. 4.652. Later in this work, he describes Chrysippus, Peripatetics and Stoics as having declared (ἀποφῆνασθαι) their positions. *Foet.Form.*, N. 78.12–16 = K. 4.674.

(φιλόσοφοι) and anatomists (ἀνατομικοί).⁶² Thus, he sets off anatomists as a distinct group, which also serves to emphasize certain physicians, such as Methodists and Empiricists, were unqualified to speak on the development of the embryo because they did not engage in anatomical research. In *Foet.Form.*, Galen refers to anatomists with various terms, such as ἀνατομικοὶ ἄνδρες, οἱ ἀνατομικοί and ἀνατομικοὶ ἰατροί.⁶³ None of these terms occur in any of his predecessors' or contemporaries' works. Thus, Galen uses these collectives to suggest a sense of unity among a rather disparate group of individuals.⁶⁴

With the notion of a collective οἱ ἀνατομικοί, Galen argues that their approach to addressing the question was methodical, veridical and quite distinct from the other two groups. To prove that anatomy was part of medical science, he claims that Hippocrates was the first to write anything truthful (ἀληθῶς) about this subject, noting how Hippocrates' approach was to 'base his investigation not on conjectures from logic (λογικαῖς ὑπονοίαις), but by discernment from observation (αἰσθηταῖς διαγνώσεσιν)'.⁶⁵ Galen then points out that not all physicians have this expertise. To emphasize this, he relates how a certain physician (τις ἰατρός), 'when he had seen only once (ἅπαξ)' an aborted embryo, which was 32 days old, concluded that all embryos have the same appearance.⁶⁶ In so doing, this physician, as Galen claims, ignored the writings of Hippocrates and others. Galen then cites a rather fanciful and often quoted passage in *Nat.Puer.* as evidence of Hippocratic expertise in anatomical observation, mentioning how the author (i.e. Hippocrates or Polybus) gave a detailed (ἀκριβῶς) and clear (σαφῶς) account of the anatomy of this embryo.⁶⁷ Thus, Galen overlooks Aristotle's lengthy treatment on the formation and development of the embryo in

⁶² *Foet.Form.*, N. 54.3–8, 96.28–30 = K. 4.652, 693. Philosophers and physicians are both seen as contributing to the knowledge of 'embryology'. For example, in Pseudo-Plutarchus' *Placita philosophorum*, one observes a series of doctrinal topics dedicated to embryology (e.g. εἰ τὸ ἔμβρυον ζῶν / πῶς τρέφεται τὰ ἔμβρυα / τὴν πρῶτον τελεσιουργεῖται ἐν τῇ γαστρὶ). In this series of topics, the author lists the opinions of both philosophers (e.g. Plato, Aristotle, Empedocles, Diogenes, Democritus, Epicurus and the collective οἱ Στωικοί) and physicians (e.g. Hippocrates, Herophilus, Polybus, Diocles and the collectives, οἱ ἰατροί and οἱ Ἐμπειρικοί). Mau 1971. 907c – 908c.

⁶³ *Foet.Form.*, (ἀνατομικοὶ ἄνδρες) N. 70.20 = K. 4.667, (οἱ ἀνατομικοί) N. 60.13, 80.12, 84.20, 94.18, 96.30 = K. 4.657, 676, 680, 690, 693, (ἀνατομικοὶ ἰατροί) N. 80.19, 90.18 = K. 4.677, 685. Galen also uses the aorist participle ἀνατεμόντες presumably to indicate those who were involved in anatomical studies. *Foet.Form.*, N. 54.6 = K. 4.652.

⁶⁴ Origen seems to view this group as a collective. οἱ γὰρ περὶ τὰς ἀνατομὰς πραγματευσάμενοι τῶν ἰατρῶν. *Philocalia*, 10.2.16–17. However, he could be simply echoing Galen's statement about οἱ περὶ τὰς ἀνατομὰς δεινοί in *UP*, K. 3.677.14, 3.682.14–15, 3.771.19; Grant 1983; Nutton 1988, 316–317.

⁶⁵ Ἱπποκράτης δὲ πρῶτος ὧν ἴσμεν ἔγραψε τι περὶ διαπλάσεως ἐμβρύων ἀληθῶς οὐ λογικαῖς ὑπονοίαις τὴν ἀκολουθίαν τῆς ζητήσεως ἐπιτρέψας, ἀλλ' αἰσθηταῖς διαγνώσεσιν, οὐδ' οὖν ταύταις ὀλίγαῖς ὥσπερ ἔνιοι καθολικὰς ἀποφάσεις ἐκ τῶν ἅπαξ ἢ δις ὀφθέντων ποιησάμενοι. *Foet.Form.*, N. 54.9–12 = K. 4.653.

⁶⁶ καὶ νῦν γοῦν τις ἰατρὸς θεασάμενος ἅπαξ ἐκτρωθὲν ἔμβρυον ἡμερῶν χ' καὶ δυοῖν ἔχον ἤδη σαφῆ τῆς διαπλάσεως ὑπογραφήν ὥς ἐπὶ πάντων ἐμβρύων οὕτω γιγνόμενον ἀπεφαίνετο μηδὲ τὰ πρὸς Ἱπποκράτους εἰρημένα, μητι γὰρ τῶν ἄλλων, ὅσοι περὶ τούτων ἱστόρησαν, ἀνεγνωκῶς. *Foet.Form.*, N. 54.13–16 = K. 4.653.

⁶⁷ *Foet.Form.*, N. 54.20–58.2 = K. 4.653. cf. Soranus, *Gyn.*, 60.

GA, a text that Galen professes to be familiar with in *Sem.*, to use a distinctively medical exemplar for this creative history of the origins of anatomy.⁶⁸ Galen's slight of Aristotle's more relevant and 'anatomical' account is purposeful in that it supports Galen's later attack on the cardio-centric theory—a theory that Aristotle put forth in *GA* and other works.

The scientific community expressed in *Form.Foet.* includes both Galen's predecessors and his contemporaries. In the case of his predecessors, he identifies them by name: Aristotle, Epicurus, Chrysippus, Plato, Hippocrates, Polybus, Herophilus and Erasistratus.⁶⁹ In the case of his contemporaries, he tends to speak of them in terms of collectives: Peripatetics, Stoics, Platonists, philosophers, physicians and anatomists.⁷⁰ Galen uses these individuals and collectives primarily to contrast the views of philosophers with those of physicians who practice anatomy. This involves a negative portrayal of a philosophical figure's or collective's understanding of the subject followed by a rather positive image of a medical figure.

For example, at the beginning of Chapter 6, he criticizes such philosophers for ignoring 'the researches of doctors' (τὰ πρὸς τῶν ἰατρῶν ἐζητημένα), and later in this chapter, he points out that 'none of those who proclaim to have a knowledge of natural philosophy' (οὐδεὶς τῶν τὴν φυσιολογίαν ἐπαγγελλομένων) have looked into what is involved in the transmission of such a large number of motions within the human body, which is a subject he claims the more conscientious doctors (ἐπιμελέστεροι ἰατροί) have looked into. By 'conscientious', he is referring to those who turn to anatomy, his so-called οἱ ἀνατομικοὶ ἰατροί. He describes philosophers who have decidedly cardio-centric views as rushing recklessly (προπετῶς) to conclusions in their attempts to prove these theories.⁷¹ This image is contrasted with that of the anatomists—physicians, whose inquiry is based both on reason (λόγῳ) and on the things that are made manifest by anatomy (τοῖς ἐξ ἀνατομῆς φαινομένοις).⁷² Thus, he claims, 'It is likely that many people have been thoroughly deceived, and particularly philosophers since they know nothing about the things revealed by animal dissections, especially the skilfully conducted dissection of living animals which is

⁶⁸ *Sem.*, de Lacy 1992, 68.3–72.19.

⁶⁹ *Foet.Form.*, (Ἀριστοτέλης) N. 68.17, 104.17 = K. 4.665, 700, (Ἐπίκουρος) N. 92.13 = 5.688, (Χρύσιππος) N. 68.15, 78.12, 104.10 = K. 665, 674, 699, (Πλάτων) N. 68.15–17, 76.3–6, 104.18, 104.12 = K. 4.665, 671–672, 700, 700, (Ἱπποκράτης) N. 54.9, 54.15, 66.6, 72.11 = K. 4.653, 653, 662, 668, (Πόλυβος) N. 54.21 = K. 4.653, (Ἡρόφιλος) N. 82.12 = K. 4.678, (Ερασίστρατος) N. 74.6 = K. 4.670.

⁷⁰ *Foet.Form.*, (Περιπατητικοί) N. 78.13 = K. 4.674, (Στωϊκοί) N. 80.14, 104.18 = K. 4.676, 700, (Πλατωνικός) N. 104.25 = K. 4.700, (anatomists) see n. 31, (ἰατροί) N. 54.3, 54.13, 66.24, 80.1, 80.5, 84.27, 88.23, 90.15, 90.28, 94.21 = K. 4.652, 653, 663, 676, 676, 681, 684, 686, 687, 690, (φιλόσοφοι) N. 54.4, 66.24, 66.33, 82.7, 82.11, 90.15, 92.6, 100.1, 100.12 = K. 4.652, 663, 664, 678, 678, 686, 687, 695, 696.

⁷¹ *Foet.Form.*, N. 102.10–21 = K. 4.698.

⁷² *Foet.Form.*, 102.21–26 = K. 4.699.

useful for laying bare the deep parts of the body.’⁷³ In this way, he portrays the anatomists as being more scientifically credible and as a distinct epistemic group with their own expertise.

His attack on philosophers and physicians hinges on homogenizing views between collectives. For example, he simplifies the differences in theoretical approaches among the three aforementioned groups by lumping philosophers and physicians together. He uses the phrase ἰατροί τε καὶ φιλόσοφοι, or a similar formula, five times in *Foet.Form.* as a way of censuring an overall theoretical position, which does not turn to anatomy for its inquiries into the body.⁷⁴ In all but one of these instances, he contrasts this meta-collective with himself or anatomists. Thus, with one broad stroke, he paints physicians who do not make use of anatomy as being the same colour as his negative image of reckless philosophers who rely on hypothetical premisses in their discussion of observable facts.

For example, he notes how physicians and philosophers all agree that during its early stages the embryo is managed in the same way as plants. While the notion of the growth of the embryo being similar to a plant was the common view of many philosophers, not all of these groups recognized the change from plant to animal in the development of the embryo, which Galen implies in this statement.⁷⁵ In this work, diverse philosophical entities, such as the Stoics, Chrysippus and Peripatetics, all are described as putting forward the same argument: namely, the heart is formed first and all other parts are formed from it, and because it is formed first, all vessels must come from it.⁷⁶ Thus, he simplifies their position with a generalization so that he may more effectively attack their collective *endoxa*.

On the flip side of this coin, Galen projects a rather orthodox view of anatomists. In multiple places in this text, he notes how anatomists are all in agreement in regard to some of the claims he puts forward.⁷⁷ In many of his other works, he depicts an agonistic relationship between different physicians who wrote about anatomy and performed anatomical demonstrations. Galen’s attempt to homogenize the views of these groups reflects the aforementioned διαίρεσις of a problem on a subject, which is commonly used in theses and treatises. However, Galen’s method is a highly rhetorical approach to these kinds of divisions in that he often focuses on negative characterizations of their scientific ethos in addition to attacking their position. Of course, the favourable image of anatomists which Galen conveys

⁷³ τοὺς πολλοὺς δ’ εἰκὸς ἐξηπατῆσθαι, καὶ μάλιστα τοὺς φιλοσόφους, ὥς ἂν οὐδὲν ἐπισταμένους τῶν ἐν ταῖς διαιρέσεσι τῶν ζῶων φαινομένων, ὧν μάλιστ’ ἐστὶ χρήσιμα τὰ κατὰ τὴν ἐπὶ τῶν ζώντων ἀνατομὴν ἐγχειρουμένην τεχνικῶς εἰς γύμνωσιν τῶν ἐν τῷ βᾶθει μορίων. *Foet.Form.*, N. 66.33–68.3 = K. 4.664.

⁷⁴ *Foet.Form.*, N. 54.4, 66.24, 90.15 cf. 80.1, 88.22 = K. 4.652, 663, 686 cf. 5.675, 684.

⁷⁵ Tieleman 1991.

⁷⁶ *Foet.Form.*, N. 78.12–15 = K. 4.674.

⁷⁷ *Foet.Form.*, N. 70.19–26, 80.9–13, 80.14–25 = K. 4.667, 676, 676–677.

in *Foet.Form.* is used to persuade the audience that his anatomical evidence is incontestable and epistemologically distinct from that of philosophers and non-anatomists.

4.2 Authorial presence and scientific ethos

Galen's presence is evident throughout this text in his use of the first person singular and plural.⁷⁸ This work demonstrates a very personal approach to his exposition. As was noted, his use of the first person plural conveys the kinds of audience-oriented transitions one would expect in a lecture. Through his use of the first person, he also creates a distinct scientific ethos. In Chapters 2 and 3, he makes it very clear that his arguments are derived from his own anatomical expertise. Here, as was discussed earlier, Galen presents a very detailed anatomical account of the initial and subsequent stages of the development of the embryo. The anatomical terminology he uses indicates to his audience that he has a command of the lexis of anatomists. Likewise, his use of the anatomical narrative of the vessels and their movement from a set origin to a destination fits with the typical model of anatomical discourse. While he does show an awareness of the writings and terminology of anatomists, he does not suggest that his findings were derived from book learning. For example, Galen indicates to his audience that he has observed via dissection the insertion of the great vein into the liver when he claims, 'And I say "implanted" since I am putting into words the appearance of its anatomy.'⁷⁹ Hence, he leaves no doubt in his audience's mind to which epistemic group he belongs.

However, he does not present a one-dimensional scientific ethos. He portrays himself as being fully aware of philosophy. He demonstrates his awareness of the terminological distinctions that the followers of Aristotle, Chrysippus and Plato make in regard to the soul.⁸⁰ He also provides terse descriptions of the causal theories of Epicurus and Stoic philosophers.⁸¹ And, as we have seen, he uses analytical terminology to point out the errors of his opponents' philosophical ἀποδείξεις. Thus, he signifies to his audience that he is qualified to be a part of a philosophical discourse on this subject.

Galen further demonstrates his philosophical leanings in this work. Through explicit remarks and coded language, he reiterates that Stoics are the primary target of most of his criticisms. He notes how the Stoics seem useless (ἄχρηστος) in their inquiries because they

⁷⁸ He uses the first person plural pronoun 27 times (0.33% of the total word count) and the first person plural verb forms 15 times (0.18% of the total word count). He uses the first person singular pronoun 18 times (0.22% of the total word count) and the first person singular verb forms 44 times (0.55% of the total word count). Appendix C, Table 2.

⁷⁹ λέγω δ' ἐμφύεσθαι τὴν ἐκ τῆς ἀνατομῆς ἰδέαν ἐρμηνεύων. *Foet.Form.*, N. 64.2–3 = K. 4.660.

⁸⁰ *Foet.Form.*, N. 68.10–23 = K. 4.665.

⁸¹ *Foet.Form.*, N. 90.27–94.2 = K. 4.687.

do not make use of anatomy for their proofs.⁸² With a bit of sarcasm, he calls them proposers of theoretical knowledge (οἱ θεωρητικὴν ὑποθέμενοι) who identify themselves with the terms φιλοσοφία and εὐδαιμονία.⁸³ And, as we have already noted, he specifically declares that his argument is especially against them (πρὸς οὓς ὁ λόγος ἐστὶ μοι μάλιστα).

Despite Plato's lack of anatomical proofs, Galen leaves him unscathed in his refutation of philosophers. We even observe Galen citing Plato's *Timaeus* (70a) in his criticisms of Erasistratus' position on blood in the arteries.⁸⁴ We also find Galen using Middle-Platonic concepts and terminology to explain his own position on the soul, such as when he describes how the human seed, male and female, will have 'the scheme of the Demiurge' (ὁ τοῦ δημιουργοῦ λόγος ἔξει). He indicates to his audience that he had multiple Platonist teachers. His Platonist leanings in this work should come as no surprise considering his affinity for the theory of a tripartite soul, which he ascribes to Plato. However, Galen does express his disagreement with one of his teacher's explanations of the soul's role in the construction of animal and human embryos.⁸⁵ He notes how this teacher claimed that the soul extends throughout the universe and constructs the embryo of humans and animals. Galen recounts how he thought it an impiety (ἀσέβεια) to believe that such a soul also constructs creatures, such as spiders, mice, mosquitoes, helminthes and vipers. At first blush, he seems to be telling his audience that his Platonic education did not make him so blind as to accept everything that was espoused by his teachers.⁸⁶ However, Galen uses this position as a way of establishing that, unlike philosophers, his scientific ethos prevents his explanations of nature from becoming impious.

In this work, Galen projects an awareness of what can and cannot be known for certain in regard to this subject. Much of this has to do with his notion of scientific and unscientific premisses as expressed in *PHP*.⁸⁷ In regard to questions that relate to lower-level physical explanations, such as the formation of the embryo and the faculties of the parts, he expresses his position in clear and dogmatic statements. He moves from topic to topic, declaring that he has proven his point. He makes the source of his arguments explicit as well. For example, as the inquiry moves forward into the faculties of the parts, he informs the audience that he must

⁸² *Foet. Form.*, N. 80.14–25 = K. 4.676–677.

⁸³ *Foet. Form.*, N. 82.5–9 = K. 4.678; Long 1996, 85–106, 179–201.

⁸⁴ *Foet. Form.*, N. 76.3–9 = K. 4.671–672.

⁸⁵ *Foet. Form.*, N. 104.25–106.2 = K. 700–701.

⁸⁶ Alexander of Aphrodisias makes the same charge using similar examples, except in this case, he links this to Stoic doctrine. Alexander of Aphrodisias, *De anima*, Todd 1976, 142.24–30. As Todd notes, Alexander's statement resembles the 'old criticism of the Stoics that they made God a meddler in details'. Todd 1976, 226–227. It would seem plausible that Galen's criticism is suggesting that this Platonist teacher is espousing Stoic ideas. However, it is quite clear from *Plac. Prop.* that Galen ascribed such a doctrine of ἡ τοῦ κόσμου ψυχὴ to Plato. *Plac. Prop.*, Nutton 1999, 104.15–108.10; Nickel 2001, 168–169.

⁸⁷ Tieleman 1996, 8–37.

move to proofs that extend beyond ‘merely the observation of the parts’ (ἐξ αὐτῆς ἀπλῶς τῆς θεας τῶν μορίων).⁸⁸ However, when the discussion proceeds to the higher cause of the formation of the embryo, i.e. the identity of the σοφωτατός τε καὶ δυνατώτατος δημιουργός,⁸⁹ he starts to reveal the limitations of anatomical and physiological evidence. However, he is quick to point out that philosophers’ evidence does not lead to true knowledge. He makes this very clear when he digresses into a story about him questioning some philosophers concerning the identity of the craftsman of the body.⁹⁰ He notes how none of their arguments met his standard of geometrical proofs (γραμμικὰ ἀποδείξεις), much less the level of rhetorical plausibility (ῥητορικὰ πίστεις).⁹¹ In fact, turning to his typical attack on sophistic arguments, he notes how none of these philosophers’ accounts agreed with each other’s. In a rhetorical move to establish an ethos of scientific self-reflection, he confesses (ὁμολόγειν) that he was unable to come to a conclusion on this topic based on his own standard of proof. He then challenges the δεινοί of philosophers ‘to ungrudgingly share with us’ (ἀφθόνως ἡμῖν αὐτοῦ κοινωνῆσαι) whatever σοφόν they find in their inquiries into this subject. This rhetorical salvo signals that these clever philosophers are only capable of deceptive arguments which fall apart under the scrutiny of Galen’s methodological approach to knowledge.

This brings me to my final point about his approach to creating his scientific ethos. At the end of this work, as was already noted in his disagreement with the Platonist teacher, Galen calls to mind Platonic language and theory. He takes on the aporetic posture of Socrates and declares, ‘Now I confess I am in a state of aporia concerning the cause of the formation of the embryo.’⁹² He then goes on to offer what he can say about the construction of bodies, namely lower level causalities such as the observable motion and order of the body, based on certain observable principles (ἐκ τίνων δ’ ἀρχῶν ἐναργῶν). The state of aporia, he proclaims, should not be taken as an admission of failure but as a clear marker as to the *ethos* of the scientific Socrates. His aporetic statements only serve to solidify his distinct position in this debate by setting up an epistemological boundary between his brand of medical inquiry and those who follow philosophical speculations. Hence, his expressed scientific *ethos* is such that, when he is faced with a subject which cannot be scientifically explained, he is wise

⁸⁸ *Foet. Form.*, N. 82.16–17 = K. 4.678–679.

⁸⁹ *Foet. Form.*, N. 98.25 = K. 4.696.

⁹⁰ *Foet. Form.*, N. 98.19–100.13 = K. 4.694–696.

⁹¹ A very thought-provoking treatment of Galen’s axiomatic reasoning can be found in Hankinson 1991.

⁹² ἔγὼ μὲν οὖν ἀπορεῖν ὁμολογῶ περὶ τοῦ διαπλάσαντος αἰτίου τὸ ἔμβρυον. *Foet. Form.*, N. 104.15–16 = K. 4.700.

enough to confess that he does not know the answer. Galen's criteria for truth limit his inquiry to physical possibilities and formal logic.⁹³

V. Message

5.1 Beginnings

Foet. Form. has a proposed subject that it maintains to its logical completion.⁹⁴ Galen begins this work with the topical phrase—περὶ κυουμένων διαπλάσεως. This is a fairly common type of beginning for a treatise. It is a rather direct way of indicating the overall subject of a work. If the author was writing on a common topic, one of the common ways in which an author situated his treatise would be to illustrate that there was some sort of disagreement (διαφωνία) among experts on a particular problem. This disagreement was illustrated by a simplification of the each party's *endoxa*. For the sake of establishing a Galenic decorum for scientific refutation, let us first turn to *Sem.* to draw some comparisons. At the beginning of this work, Galen sets forth the epistemic frame for his refutation of Aristotle and Peripatetic philosophers' theories:

What is the use and what is the power of semen? Is it to be reckoned as two principles, the material and the active, as Hippocrates supposed (ὑπέλαβεν), or only one of them, the efficient, as in the opinion of Aristotle, who holds (νομίζων) that it provides a beginning of motion for the menstrual blood but does not grant that any part of the animal is formed from it? It is worthwhile to investigate (ἐπισκέψασθαι) and analyze (διακρίναι) the disagreement (διαφωνίαν) of such venerable men, not by recourse to plausible arguments (οὐ πιθανοῖς λόγοις), which the majority of physicians and philosophers delight in, but by demonstrative arguments that begin and proceed through what is manifest (ἐξ ἐναργῶν τε καὶ δι' ἐναργῶν ἀποδεικνύντες). And since Aristotle too believes that the premisses (τὰ λήμματα) for demonstration (ἀποδείξεις) should be taken from experience (ἐμπειρίας) pertinent to each matter under investigation, let us first (πρῶτον) examine (ἐπισκεψώμεθα) the following point: whether the

⁹³ Frede 1981; Hankinson 1991; Barnes 1993.

⁹⁴ q.v. n. 23 in this chapter.

semen remains with the one who is about to become pregnant or whether it too is voided.⁹⁵

This passage illustrates a number of formal features and rhetorical moves, which we have observed in our discussion of *Foet.Form*. The first rhetorical move occurs in the doxographical statements of this passage. Here, he does not give a full argument of these men. Rather, he presents an individual claim. He creates a need to explore the statements by showing that there is a disagreement (διαφωνία) between experts on a specific issue and by suggesting that these men are articulating opinions which have yet to be proven. He describes Aristotle as thinking/believing (νομίζει/οἶεται) the dictum to be true, and in the case of Hippocrates, he uses ὑπολαβεῖν to indicate that Hippocrates was less resolute in regard to his dictum because he ‘assumed’ or ‘supposed’ it to be so. Hence, Galen’s choice of verbs and adverbs characterizes the nature of these men’s positions as conjecture. By suspending his judgment on their reasoning, he intimates that these men’s views are still unproven, and therefore, their *dicta* require his confirmation or refutation.

Likewise, at the beginning of *Foet.Form.*, Galen points out that all philosophers and physicians who did not use anatomy in their works on the formation of the embryo have disagreed (διαφωνῆσαι) among themselves.⁹⁶ In this way, Galen creates a sense of disagreement between anatomists and the other two groups in the aforementioned scientific community. However, he also points out that anatomists have remained ignorant of certain matters (τινὰ). Thus, the audience is to understand that the subject matter needs to be examined, and the way to best do this is by using anatomy as one’s starting point for inquiry.

The second rhetorical move is to characterize the type of evidence he uses to demonstrate the truth. This is done by claiming that he is properly applying the principles of Aristotle’s analytics.⁹⁷ He claims that his conclusions are superior to the plausible arguments (πιθανοὶ λόγοι) of philosophers and physicians because his premisses are derived from experience (ἐμπειρία) concerning the matters being sought. Galen makes it very clear in the following passages what he means by ἐμπειρία, noting how he did not trust the account of others and, therefore, how he tested (πειραθῆναι) what they said through the observation of

⁹⁵ Τίς ἡ χρεια καὶ τίς ἡ δύναμις ἐστὶ τοῦ σπέρματος; ἀρά γε λόγον ἔχει δυοῖν ἀρχῶν, ὑλικῆς τε καὶ δραστηκῆς, ὡς Ἱπποκράτης ὑπέλαβεν; ἢ τῆς ἐτέρας μόνης, τῆς ποιητικῆς, ὡς Ἀριστοτέλης οἶεται, ἀρχὴν μὲν κινήσεως ὑπὲρ αὐτοῦ γίγνεσθαι τῷ καταμηνύῳ νομίζων, οὐ μὲν ἐξ αὐτοῦ διαπλάττεσθαι τῷ ζῳῷ συγχωρῶν; ἀξιον οὖν ἐπισκεψασθαι καὶ διακρίναι τηλικούτων ἀνδρῶν διαφωνίαν, οὐ πιθανοῖς ἐπιτρέψαντες λόγοις, οἷς οἱ πλείστοι τῶν ἰατρῶν τε καὶ φιλοσόφων χαίρουσιν, ἀλλ’ ἐξ ἐναργῶν τε καὶ δι’ ἐναργῶν ἀποδεικνύντες. ἐπεὶ δὲ ἐκ τῆς περὶ ἐκάστου τῶν ζητουμένων ἐμπειρίας οἶεται χρῆναι καὶ Ἀριστοτέλης εἰς τὰς ἀποδείξεις λαμβάνεσθαι τὰ λήμματα, πρῶτον τοῦτο ἀκριβῶς ἐπισκεψώμεθα, πότερον ἔνδον μένει τὸ σπέρμα τῆς μελλούσης κύσεως, ἢ καὶ συνεκκρίνεται. *Sem.*, de Lacy 1992, 4–14. Here, I have made some changes to De Lacy’s translation.

⁹⁶ *Foet.Form.*, N. 3–8 = K. 4.652.

⁹⁷ Tieleman 1995, 490–494; Hankinson 1991, 15–17.

animals and his dissection of a large number of pregnant animals.⁹⁸ Again, his premisses for his arguments are necessarily true because the subject matter he uses is appropriate and observable. He relegates his contemporary opponents' premisses to the level of plausibility, which again calls to mind the principles of premisses that Galen articulates in *PHP*: Rhetorical premisses are based on plausible evidence, and therefore, they only lead to plausibility not knowledge.

Similarly, in *Foet.Form.* Galen conveys the message that the material he will use to demonstrate what can be known about this subject is epistemologically secure, can and should be mated to logical proofs and ultimately will lead to knowledge. And, likewise, he undermines the security of his opponents' demonstrations by pointing out that their premisses were derived from speculative evidence, and that is why these men fall into disagreement with each other. In other words, if they were to use the right method and evidence, they would always reach the same conclusion. Thus, the way in which the subject of a treatise was made meaningful to examine has much to do with the way in which a thesis was presented.

5.2 Organizing principles

One of the recurring features in *Foet.Form.* is the criticism and refutation of particular positions. These refutations are far less formulaic and systematic than the ones found in Aristotle's *PA* and *HA* or Alexander of Aphrodisias' *Mixt.*⁹⁹ Nevertheless, one can discern from Galen's topics that his account responds to cardio-centric positions on the formation of the embryo. As was noted, some of the topics that Galen addresses in *Foet.Form.* are common philosophical *problemata* one finds in *Placita* literature, such as Pseudo-Plutarch's *Placita philosophorum*. In *Foet.Form.*, Galen touches upon the following *problemata*: 'Whether the embryo is a living being (Εἰ τὸ ἔμβρυον ζῶον)?'; 'What is the first thing completed in a womb (Τί πρῶτον τελεσιουργεῖται ἐν γαστρὶ)?'; and 'How are embryos nourished (Πῶς τρέφεται τὰ ἔμβρυα)?'.¹⁰⁰ I mention this only to stress that in order for Galen to speak to such well-recognized questions of natural philosophy, it was necessary for him to establish his position among his predecessors and contemporaries. Ultimately, the reoccurring, organizing principle in *Foet.Form.* is to criticize and refute previous theories in order to advance one's own.

There are other more epistemological principles that contribute to the way in which Galen has composed *Foet.Form.* Galen makes quite clear what the appropriate starting point

⁹⁸ *Sem.*, de Lacy 1992, 64.15–68.14.

⁹⁹ Lengen recognizes 'Kritik und Widerlegung anderer Meinungen' as being recognizable formal features of a 'Pragmatie' in *HA* and *PA*. Lengen 2002, 191–210.

¹⁰⁰ Pseudo-Plutarch, *Placita philosophum*, 904–9011.pin.4–pin.31.

(ἀρχή) for his treatment of this subject is. He declares that anatomy is the ἀρχή of his treatment of this subject. Thus, the anatomical accounts that he gives at the beginning of *Foet.Form.* serve as ‘items of data’ by which Galen can ‘advance to axioms’ for his demonstration.¹⁰¹ This can be perceived in the transitional statement at the end of his anatomical account. He uses the imperative to say ‘let it be submitted’ (ὑποβεβλήσθω) that the prior anatomical account will be the foundation (θεμέλια) for the arguments to follow.¹⁰² He exhorts the audience, ‘let us examine’ (σκοπώμεθα) the formation of the embryo by the power of the sperm making the observations for anatomy as the starting point (ἀρχή).¹⁰³ In other words, to find the answer to something that cannot be observed, i.e. the power of the sperm, one should pull the information for one’s premisses from what can be observed, namely the anatomy of the embryo. Thus, a common mode of his argumentation in *Foet.Form.* is to relate his observations of anatomical and physiological phenomena and then use this information to deduce an aspect of the construction of the embryo that is not self-evident or observable.

The nature of the questions is another way in which *Foet.Form.* is structured along epistemological lines. That is to say, Galen moves from the most anatomical–physiological types of problems to those which require higher or non-scientific evidence, i.e. metaphysical causes. This order is conveyed in the way he moves from problems that can be solved by the evidence provided from anatomical observation of the parts to questions of the faculties of these parts, which is the kind of topic that requires physiological experimentation and extrapolation. And, lastly, he addresses the kinds of metaphysical questions that cannot be determined via purely scientific observations, such as the identity and nature of the soul that constructs bodies. He brings *Foet.Form.* to a suitable conclusion by declaring what he can scientifically say about the αἰτία τοῦ κυομένου γενέσεως and by directing the audience toward one of his texts which demonstrates how no one has scientifically answered this metaphysical question.¹⁰⁴

5.3 The embryo and anatomical evidence

As was noted earlier, the formation of the embryo was a standard question of philosophy and medicine, which can be seen in the series of questions on the embryo presented in *De placita philosophorum*. Of the three aforementioned questions from this work, the question—τὶ πρῶτον τελεσιουργεῖται ἐν τῇ γαστρὶ—is of central importance to

¹⁰¹ Hankinson 1991, 24.

¹⁰² *Foet.Form.*, N. 62.23–24 = K. 4.660.

¹⁰³ *Foet.Form.*, N. 62.25–27 = K. 4.660.

¹⁰⁴ *Foet.Form.*, N. 106.10–13 = K. 4.702.

Foet. Form. The author lists six *doxai* on this subject: He claims οἱ Στωικοί believe the whole thing is formed; Ἀριστοτέλης puts forward the loins; Ἀλκμαίων says it is the head; οἱ ἰατροί say it is the heart; and in regard to the two other groups, one says it is the big toe and the other claims it is the navel.¹⁰⁵ While this is not necessarily an accurate portrayal of the views of these groups, it does suggest that Galen's position that the liver was formed first was not a well-recognized position. The list also illustrates that Aristotle was well-recognized for his views on the formation of the embryo as well as on other matters of generation.¹⁰⁶

This brings me to the question of whether anatomical proofs, in regard to this topic, would have been cogent for a scientific community of the philosophically inclined.¹⁰⁷ In short, the answer is a qualified 'yes'. While some groups, such as Skeptics and Empiricists, undoubtedly would not accept such proofs for epistemic reasons,¹⁰⁸ anatomy was a celebrated science in Rome, if we are to believe Galen's accounts. Galen describes in many of his works how his anatomical demonstrations were well received and drew large crowds of intellectuals. His descriptions of the audiences for his public anatomical displays demonstrate that the topic was of interest not only to physicians and philosophers but also to the educated élite.¹⁰⁹ He describes how one of his anatomical displays lasted four days and was attended by 'all the intellectuals (φιλόλογοι) in Rome'.¹¹⁰ If we are to take Galen's word, he was writing in a time in which anatomists of the 1st century BC had recently advanced the study of anatomy and had promoted it in Rome.¹¹¹ As to the subjects related to the embryo, Marinus (AD c. 130), whom Galen credits with the revival of anatomy, dedicated one book to discussing the womb—the male and female urogenitary system—in his 20-book oeuvre, ἀνατομικαὶ ἐγχειρήσεις. This topic was greatly expanded upon by Galen's contemporary, Lycus of Macedon, who devoted two books specifically to the ἐμβρύον.¹¹²

Alexander of Aphrodisias, whose interest in medical topics has already been stated, provides a suitable, good candidate to see how philosophers used anatomical knowledge in their discourses on the soul/body. Alexander only refers to ἀνατομή in his works a couple of times, noting how something can be observed ἐκ/διὰ τῶν ἀνατομῶν.¹¹³ The most detailed

¹⁰⁵ {115'. τί πρῶτον τελεσιουργεῖται ἐν τῇ γαστρὶ} Οἱ Στωικοὶ ἅμα ὅλον γίνεσθαι. Ἀριστοτέλης πρῶτον τὴν ὀσφὺν ὡς τρόπιν νεῶς. Ἀλκμαίων τὴν κεφαλὴν, ἐν ᾗ ἔστι τὸ ἡγεμονικόν. Οἱ ἰατροὶ τὴν καρδίαν, ἐν ᾗ αἱ φλέβες καὶ αἱ ἀρτηρίαι. *Placita philosophorum*, Mau 1971, 907.E.7–907.F.2.

¹⁰⁶ cf. Lucian, *Vit. Auct.* 26.1–29.

¹⁰⁷ von Staden 1995; 1997.

¹⁰⁸ *Praen.*, Nutton 1979, 98; von Staden 1995, 55–59.

¹⁰⁹ von Staden has demonstrated that the language Galen uses to describe his anatomical displays reflects the language and circumstances used to describe epideictic speeches of the so-called Second Sophistic. von Staden 1995; 1997.

¹¹⁰ *Praen.*, Nutton 1979, 98.

¹¹¹ Nutton 2004, 138–139, 213–215; von Staden 1989, 445–446.

¹¹² *Lib. Prop.*, Boudon-Millot 2007, 145.26–154.15; Nutton 2004, 214.

¹¹³ *in Sens.*, 27.11, 35.27; *De An.*, 96.26.

account of anatomy that we have of his is found in his treatise *De anima*. Here, Alexander notes:

We can argue too from the principle that the sensory faculty must not be fragmented, but that it should rather be concentrated around one single organ. Now the process of dissection reveals very clearly that the senses of touch and taste originate in the heart; so that the rest of the senses too should be located in the vicinity of this organ.¹¹⁴

He supports this claim with an account in which he describes how the περικαρδίον, which surrounds the heart, is not easily split open with a knife (σίδηρος). He then notes how the body of the heart is in the midst of nerve and flesh (τὸ σῶμα μεταξύ πῶς ἐστὶ νεύρου τε καὶ σαρκός), which, he claims, gives the heart its firmness (στερεότης) and explains why it is well adapted for receiving sensations and being the source of movement for the body. While his position on the heart's role in sensation is thoroughly Aristotelian, his description of this 'dissection' as well as his use of an anatomical term from the 1st century AD, περικαρδίον, suggest that he is trying to portray himself as being versed in anatomy. However, when he claims that the heart is the first among bodily organs to be formed, he does not turn to a discussion of the anatomy of the embryo to justify his claims. He simply claims that this is evident by its nutritive faculty, which he has already proven via its position in the chest and the branching of the arteries away from the heart.

Alexander also indicates an awareness of anatomical and medical proofs that contradict his cardio-centric arguments. In his rebuttal of those who try to prove that the controlling part of the soul is in the head or brain, Alexander describes the kind of medical and anatomical evidence that Galen puts forward for the brain being the ἡγεμονικόν.¹¹⁵ First, he explains why a loss of 'mental' faculties is restored when medical treatment is applied to the head.¹¹⁶ He points out that any treatment to the head will also have an effect on the heart, so this does not prove that the head is the ἡγεμονικόν. He then appears to point to anatomical displays, declaring that 'Nor does the amputation of some part of the body, which they do to some animals, afford any proof of what is being set forth [i.e. the commanding power is located in the head], because the evidence from amputation is ambivalent'.¹¹⁷ His explanation

¹¹⁴ καίτοι, εἰ ἦν ἡ θεραπευτικὴ κεχωρισμένη, φθαρείσης τῆς αἰσθητικῆς οἷόν τε ἂν ἦν ζῆν ἔτι τὸ ζῶον, ἔχον γε τὴν θεραπευτικὴν δύναμιν, ἥτις ἦν τοῦ ζῆν χορηγός. ἔτι δέ, εἰ ἀναγκαῖον τὸ αἰσθητικόν μὴ διεσπᾶσθαι, ἀλλ' εἶναι τήνδε τὴν δύναμιν περὶ ταῦτό τι, προδήλως δὲ διὰ τῶν ἀνατομῶν εὐρίσκεται ἀρχὴ οὖσα ἡ καρδιά τῆς τε ἀφῆς καὶ τῆς γεύσεως, εἶεν ἂν καὶ αἱ λοιπαὶ περὶ τὴν καρδίαν. *De An.*, 96.23–28 tr. Fotinis 1979, 129.

¹¹⁵ *De An.*, 99.30–100.13.

¹¹⁶ *Foet. Form.*, N. 80.26–82.4 = K. 4.677–678.

¹¹⁷ ἀλλ' οὐδὲ αἱ τῶν μορίων ἀφαιρέσεις, ὥς ἐπὶ τινῶν ζώων ποιοῦνται, δεικτικαὶ τοῦ προκειμένου. κοιναὶ γὰρ εἰσιν πρὸς ἀμφοτέρω. *De An.*, 100.8–9.

for this is that some animals show signs of life after their heart has been removed, and likewise, some animals show signs of life when their head has been removed. All this proves, as Alexander claims, that there is a *συνπρόθεια* between the heart and the brain.¹¹⁸

It appears that Alexander has not conducted such an experiment himself and is relying on Aristotle for his information. Hence, he lists the chameleon and the tortoise as animals that live after their hearts have been removed. This piece of misquoted evidence is taken from Aristotle's description of the chameleon (*HA* 503a.15–503b.27) in which he mentions the same two animals but only describes dissecting the chameleon, and while it is true that Aristotle says this lizard keeps moving after dissection, it is not true that he actually claims that he removed its heart. While Alexander touches upon the same questions and topics as Galen does in *Foet.Form.*, he makes no serious attempt at addressing contemporary anatomical evidence. His refutation of the anatomical proofs that Galen discusses does not necessarily suggest that he is responding to modern discoveries in anatomy. However, the evidence that he puts forward in response seems to show that his anatomical knowledge is limited to what Aristotle has put forth. Therefore, it would appear that even for a philosopher who was familiar with medicine, such as Alexander, the persuasiveness of anatomical evidence was a mixed bag. He refutes anatomical/physiological evidence that does not correspond with his theoretical constructions of human physiology, but when the evidence supports his claims, he makes use of it. This, perhaps, explains why Galen pays much attention to stressing the veridical nature of anatomical evidence and its relationship to logical proofs.

5.4 Scientific *ἀποδείξεις* and the modality of philosophical inquiry

In order for Galen to effectively refute the claims of philosophers and physicians, it was necessary for him to establish that his anatomical and physiological observations were a valid source of evidence for logical demonstrations (*ἀποδείξεις*). In regard to refuting the *ἀποδείξεις* of his opponents, Galen was obligated to demonstrate not only where they had erred in their logic but also how his own inferences were necessarily true.

The first step in this process is to create doubt in the logical certainty of his opponents' positions. In *Foet.Form.*, Galen creates the need for his inquiry by indicating that his opponents' reasoning on this subject merely amounts to speculation. He does this by the *modi*

¹¹⁸ It is plausible that Alexander is responding to Galen's criticisms of the cardio-centric position expressed in works such as *Foet.Form.* and *Sem.* In these works, Galen is rather critical of Aristotle. While Alexander never mentions Galen in this work, he did, in fact, write two tracts, *A Refutation of Galen 'On the Possible'* and *A Refutation of Galen 'On the First Mover'*, which demonstrate that he viewed Galen as an intellectual figure worthy of his attention. Nutton 1988, 318–321; Rescher and E. Marmura 1965.

he chooses to express their reasoning.¹¹⁹ At the beginning of this work, he notes how philosophers and physicians ‘believed (ἐπίστευσαν) in their own conjectures (ταῖς ἑαυτῶν ὑπονοίαις) without observations from anatomy.’¹²⁰ Later in Chapter 4, he states:

I entered upon this account of the formation of the embryo, which in of itself is a very useful topic not only for philosophers but also physicians, in order to talk about matters which were necessary (ἀναγκαίως) for us to investigate (ζητηθέντα) due to those men who select premisses (λήμματα) for their proofs (ἀποδείξεις) from sources from which they should not.¹²¹

And, in Chapter 6, when he turns to questions of metaphysical causality of the formation of the embryo, he states:

If, then, we turn back to what was set forth in this treatise, we will show that they did not even think it fit to properly examine (καλῶς ἀξιῶσαντας ζητῆσαι) the inquiries of physicians, but they believe (οἰομένους) that if they say the embryo is formed by nature they have said something more than a common term (συνήθους ὀνόματος).¹²²

¹¹⁹ Modality, as defined by Frow, is ‘the indication by a speaker of his or her assessment of the validity of what is said: by the use of such grammatical means as auxiliary verbs or qualifying adverbs, a proposition is characterised as being true, necessary, desirable, possible, known, believed, permissible, and so on. Logicians distinguish between the following kinds of modality: *alethic*, having to do with truth, necessity or possibility; *epistemic*, expressing my knowledge of what I am saying; *doxastic*, expressing my belief; *deontic*, having to do with obligation or permission; and ‘*boulomaic*’, expressing my desires or preferences in relation to the proposition. The tense of the verb is sometimes counted as a form of modality.’ Frow 2006, 150.

Auxiliary verbs, qualifying adverbs, prepositional phrases or clauses, and certain impersonal constructions, such as ἀναγκαῖόν ἐστι, influence interpretation by revealing the type of reasoning that is being applied to a statement. For example, in the statement ‘The young lady fell down. She must be ill.’, the use of ‘must’ indicates *alethic* reasoning has been applied by the author in regard to the *dictum* ‘She is ill.’. The audience is to recognize that the second statement is bound by the reasoning of possibility and necessity. However, in the case of ‘The young lady fell down. She must be helped.’, the use of ‘must’ indicates *deontic* reasoning, which suggests that the author’s reasoning is based on norms and moral obligations. In these two cases, the *modus* ‘must’ can express two different types of logical thinking. The first *dictum* can be altered to reflect *doxastic* reasoning: ‘The young lady fell down. I believe/they say she is ill.’. In this case, the *modi* ‘I believe’ and ‘they say’ reveal that the author has based his conclusion on unverified belief or supposition. Hence, the selection of the type of *modus* is one of the ways in which an author can rhetorically affect how an audience perceives the reasoning behind a claim in scientific discourse.

¹²⁰ ὅπου γὰρ καὶ τοῖς ἀνατεμῶσιν ἐπιμελῶς ἡγνοήθη τινά, πολὺ δὴπου μᾶλλον εἰκὸς ἦν ἀμαρτεῖν, ὅσοι ταῖς ἑαυτῶν ὑπονοίαις ἐπίστευσαν ἄνευ τῶν ἐξ ἀνατομῆς φαινομένων. *Foet.Form.*, N. 54.6–8 = K. 4.652.

¹²¹ ἐνεσθησάμην γὰρ ἐν τῷδε τῷ λόγῳ περὶ διαπλάσεως τῶν κυομένων εἰπεῖν, εὐχρηστον λόγον αὐτὸν καθ’ αὐτὸν οὐ μόνον τοῖς φιλοσόφοις, ἀλλὰ καὶ τοῖς ἰατροῖς, διὰ δὲ τοὺς ἀφ’ ὧν οὐ χρὴ τὰ λήματα πρὸς τὰς ἀποδείξεις λαμβάνοντας ἀναγκαίως ἡμῖν ζητηθέντα. *Foet.Form.*, N. 78.32–80.3 = K. 4.675.

¹²² μεταβάντες οὖν ἐπὶ τὸ μάλιστα προκείμενον ἐν τῇδε τῇ πραγματείᾳ δεῖξομεν αὐτοὺς μηδὲ τὰ πρὸς τῶν ἰατρῶν ἐζητημένα καλῶς ἀξιῶσαντας ζητῆσαι, ἀλλ’ οἰομένους, ἐὰν εἰπωσιν, ὑπὸ τῆς φύσεως διαπλάττεσθαι τὸ κυούμενον, εἰρηκέναι τι πλεον ὀνόματος ἅπασιν συνήθους. *Foet.Form.*, N. 90.27–92.1 = K. 4.687.

What can be seen in the above is that Galen undermines these philosophers' claims by describing their reasoning with *doxastic modi*, such as πιστεύειν, οἶεσθαι and ἄξιον. Throughout this work, these philosophers are described as believing or thinking that their position is correct. These accusations are supported by the philosophical terms he uses to describe their claims. He makes it explicit that their theories are unproven assumptions.¹²³ Furthermore, the definitions they use in their proofs are not analytically derived but are merely common terms; that is, the words they use do not signify the nature of the object to which they refer. Thus, he suggests that their dialectical acumen is not at the level it should be.

What is of critical importance in Galen's criticism of their analytical reasoning is his claim that these philosophers have erred in their 'selection of premisses (λήμματα) for their proofs (ἀποδείξεις)'. In every key point in this work, he indicates that the reason their premisses are merely assumptions is caused by their failure to take into account what ἀνατομικοὶ ἰατροί have already demonstrated.¹²⁴ His refutation is a form of ἔνστασις in that his primary attack is not directed toward the conclusions of his opponents but toward the proposition. This claim should be seen in the light of Aristotle's, as well as Herophilus', view that perceptible phenomena are the starting points for the natural scientists.¹²⁵ Hence, Galen is not putting forward something novel. He is merely pointing out a principle within philosophical inquiry. However, from a rhetorical point of view, this claim would have some mileage if he could prove that his anatomical observations were, indeed, manifestly true and that his opponents' were not.

Because his audience was not necessarily privy to such anatomical φαινόμενα, Galen must reassure them that his anatomical observations are indubitable and distinctly superior to his opponents'. As was noted earlier, he does this by creating a distinct and unified epistemic group of ἀνατομικοὶ ἰατροί. In *Foet.Form.*, the disparate observations of anatomists are almost entirely overlooked in order to demonstrate that all Galen has observed is manifestly true given that all anatomists are in agreement.¹²⁶ In addition to these collectives, he also turns to Hippocrates and Herophilus to show his audience that he is not introducing something untested and unknown to the most notable figures of medicine. He recognizes that philosophers and physicians could make similar claims about what they or their predecessors have observed in regard to the embryo. Therefore, he undermines the credibility of their

¹²³ *Foet.Form.*, N. 100.7, 102.12–13 = K. 4.695, 698.

¹²⁴ *Foet.Form.*, N. 54.3–8, 66.33–68.3, 78.32–80.4, 80.14–24, 82.10–17, 90.27–92.9, 102.10–26 = K. 4.652, 664, 675, 676, 678, 687, 698.

¹²⁵ *PA* 639.b.3–640a.14; *APo.* 71b.33; *Top.* 141b.15; von Staden 1989, 117–120.

¹²⁶ *Foet.Form.*, N. 80.17–20, 82.10–16 = K. 4.676, 678.

potentially conflicting observations by painting philosophers and physicians as a group which relies on antiquated and simplistic anatomical observations. At the outset, he makes a distinction between those who make claims based on one or two observations (ἄπαξ ἢ δις ὁφθέντων ποιησάμενοι) of an embryo and those who have made their claims with a substantial amount of observation (οὐδὲ ταύταις ὀλίγαις).¹²⁷ And, later, he insinuates that they are relying on antiquated anatomical knowledge which does not reflect discoveries of current anatomical evidence.¹²⁸

Another method of making this empirical data acceptable to his audience is by presenting it in great detail. Hence, in Chapters 2 and 3, Galen provides detailed anatomical descriptions of the embryo and its development for his audience. He moves from external to internal features of the embryo, tracing movement, insertion and size of the four vessels that supply nutriment to the embryo. He occasionally stops to note what terms anatomists have given to various parts. This narrative is quite rhetorical in that he focuses on specific aspects of this anatomy which are necessary for his claims. Hence, he notes that two of the four vessels which pierce the chorion, the membrane surrounding the embryo, are inserted into the liver. He describes this as follows:

For, of the four vessels we have discussed, which unite at the place called the navel together with the channel to the bladder, right when they pierce the skin (εὐθύς ἅμα τῷ διελθεῖν τὸ δέρμα) of the embryo, the first pair of vessels is observed (φαίνεται) immediately (παραχρῆμα) becoming one and having created the great vein which implants itself (ἐμφύεσθαι) in the liver. And I say ‘implanted’ since I am putting into words the appearance (ιδεάν ἐρμηνεύων) of its anatomy.¹²⁹

He then goes on to explain that he does not mean that the liver existed before the great vein entering the body. Rather, he notes that the liver is created from the branching of the great vein. What makes this description a nice piece of rhetoric is how he indicates the ontological primacy of the liver as opposed to any other vessel. He does this by using the typical anatomical narrative that uses the vessels as a point of perspective. However, he uses temporal adverbs to suggest that the liver is formed immediately after these vessels pierce the embryo. This is a key point given that much of his later arguments depend on the liver being

¹²⁷ *Foet.Form.*, N. 54.9–12 = K. 4.653.

¹²⁸ *Foet.Form.*, N. 80.14–82.4 = K. 4.676–678.

¹²⁹ φαίνεται γὰρ τῶν εἰρημένων τεττάρων ἀγγείων, ἃ κατὰ τὸν ὀνομαζόμενον ὀμφαλὸν ἅμα τῷ κατὰ τὸν οὐραχὸν πόρῳ συνίστησιν εὐθύς ἅμα τῷ διελθεῖν τὸ δέρμα τοῦ κυομένου, τὸ μὲν ἕτερον ζεύγος ἐνούμενόν τε παραχρῆμα καὶ μίαν φλέβα μεγάλην γεννῆσαν ἐμφύεσθαι τῷ ἥπατι. λέγω δὲ ἐμφύεσθαι τὴν ἐκ τῆς ἀνατομικῆς ιδεάν ἐρμηνεύων. *Foet.Form.*, N. 62.27–64.2. = K. 4.660.

formed before the heart, a claim that most philosophers and physicians seem to reject. He also evokes the image of the rooting of a plant with his use of ἐμφύεσθαι.¹³⁰ Here, he reminds his audience of the common perception of the embryo being likened to a plant. However, he is keen to claim that it is the liver that is the first part to be created from the rooting vessels. Again, this image will come into play later when he tries to show that the liver, not the heart, serves a role in the initial vegetative stage of the embryo. This account is supported by his claim to have observed this.

A distinctive feature of this work is the attention he pays to the epistemological categorization of the claims and observations. In this work, there are two major categories: one is tied to levels of plausibility, such as οὐ πιθανόν, ἀπιθάνον, πιθανόν, πιθανώτερον and πιθανώτατον, and the other is associated with what is necessarily and evidently true, ἀναγκαῖον and σαφῶς.¹³¹ Questions that need to be examined or conclusions that fail to meet his standard of scientific proof are classified in terms of plausibility. Throughout this work, he indicates a general reluctance to leave his conclusions at the level of plausibility. When he does make an inference in an area of uncertainty (ἐν ἀδήλοις ἀποφύνασθαι), he qualifies what he is declaring as being very probable (πιθανώτατον).¹³² Conversely, throughout this work, he describes his opponents' theories as being πιθανόν until they are examined, at which point they always become οὐ πιθανόν. He primarily associates the *modus* σαφῶς with his own anatomical observations and inferences to indicate that they are *epistemic*.¹³³ Likewise, he uses ἀναγκαῖον to indicate that a line of argument is necessarily true. For example, after describing his opponents' lines of reasoning, he notes, 'None of these claims is a necessary truth (οὐδὲν ἀναγκαῖον), but even if it appears to be possible (ἐνδεχόμενον) to some initially, it is subsequently refuted through many observations (διὰ πολλῶν φαινομένων).'¹³⁴ The reason for this stems from their first assumption (πρώτη ὑπόθεσις), which Galen claims is based on what is unrecognizable with the senses (ἄγνωστον αἰσθήσει) and which cannot be found with logic (λόγῳ ἀνεύρετον).¹³⁵ Hence, as Galen claims, an inquiry into the formation of the embryo is possible (δυνατόν) only if it

¹³⁰ Nickel 1989.

¹³¹ *Foet.Form.*, (πιθανόν) N. 66.26, 74.6, 88.10, 96.3–4, 96.18, 104.14 = K. 4.664, 670, 684, 691, 692, 700, (σαφῶς) N. 54.22, 66.8, 70.14, 74.17–18, 78.8, 78.16, 82.3, 84.15, 98.4 = K. 4.653, 662, 667, 671, 674, 674, 678, 680, 693, (ἀναγκαῖον) N. 64.29, 66.29, 78.15, 78.19, 80.3, 86.17, 92.15, 102.19 = K. 4.662, 664, 674, 674, 675, 682, 688, 698.

¹³² *Foet.Form.*, N. 88.3–24 = K. 4.683.

¹³³ See n. 118, 130.

¹³⁴ ὧν οὐδὲν ἀναγκαῖον ἐστίν, ἀλλὰ κατὰ πρώτην μὲν ἐπιβολὴν ἐνίοις ἐνδεχόμενον εἶναι δοκοῦν, ὕστερον δὲ διὰ πολλῶν φαινομένων ἐλεγχόμενον. *Foet.Form.*, N. 102.19–21 = K. 4.698.

¹³⁵ *Foet.Form.*, N. 102.10–21 = K. 4.698.

begins with anatomy.¹³⁶ Thus, Galen's systematic use of *modi* to classify levels of reasoning is one of the ways in which he attempted to give a distinctively scientific voice to his own claims.

VI. Conclusion

Foet.Form. provides an example of Galen's method of scientific inquiry and refutation, and it is a work that reflects some of the ideals concerning scientific discourse he puts forward in *PHP*. In *Foet.Form.*, Galen emphasizes a dichotomy in the way in which the construction of the embryo has been studied. On the one hand, there are physicians and philosophers who disregard anatomical evidence, and therefore, their accounts of the construction of the embryo are in error. On the other hand, there are anatomists who possess a great amount of observational evidence about the anatomy of an embryo but who are unable to extrapolate this knowledge. While Galen, by and large, aligns himself with anatomists in *Foet.Form.*, he conveys an intriguing scientific persona that emphasizes his expertise both as anatomist and as logician.

His scientific *ethos* in this work also contributes to the persuasiveness of his arguments. In the work, he emphasizes his unyielding commitment to speaking only to questions that he can answer via scientific proofs. Thus, when faced with the kinds of metaphysical explanations in which philosophers often engage when discussing the cause of the construction of the embryo, Galen professes that he simply will not run their course of wild speculation because it is not fitting for a seeker of knowledge. To reassure his audience that anatomical evidence can speak to issues concerning this subject, Galen presents a detailed anatomical description of the embryo, and then, he proceeds to use this information to undermine the cardio-centric views that Stoic and Peripatetic philosophers have in regard to the formation of the parts of the embryo and how they relate to the locus and activity of the soul(s).

¹³⁶ *Foet.Form.*, N. 80.14–16, 106.3–9 = K. 4.676, 701.

Conclusion

We have come to the point in this study where we should take stock of the points of analysis raised. In Galen, we have an author who is able to use a wide variety of genres to make his approach to medicine more fashionable, intelligible and persuasive. This study has illustrated how he uses two decidedly different styles of philosophical discourse to convey the logical and ethical superiority of medicine over athletic training. We have observed how Galen responds to his critics and secures his tenuous alignment with the attractive figure of the Father of Medicine by weaving a highly argumentative meta-narrative into his commentary on *Nat.Hom.* In the case of *Lib.Prop.*, we presented how Galen places his own spin on the propaedeutic method used for the study of a philosopher's oeuvre. In *Puls.*, we took note of Galen's didactic approach to making his pulse theory accessible to beginners. And finally, in his πραγματεία *Foet.Form.*, we studied some of the rhetorical aspects of Galen's approach to scientific inquiry and refutation.

I. Presence of the author and audience

Quantitatively, the presence of the author and audience varies tremendously from text to text in this study. When we compare the total number of first-person versus second-person forms (verbal, pronominal and adjectival) in the body of a text, *Lib.Prop.* and *Foet.Form.* stand out as works that, by and large, do not address the audience. In *Foet.Form.*, the ratio between first and second person is 104:1 while in *Lib.Prop.*, the ratio is undefined because Galen never addresses the audience in the body of the work, i.e. 152:0.¹ On the opposite end of the spectrum are *Protr.* and *Puls.* In *Protr.*, the ratio between first and second person forms is 1:1, and in *Puls.*, the ratio is closer to 2:1.² Such variations suggest that the audience and author's presence in a text are shaped by the genre rather than the general usage of the first person or second person.

However, one should not take such differences in ratios as indicative of a text being more or less oriented toward an audience. In *Lib.Prop.*, Galen almost exclusively uses the first person singular (96% of the occurrences of the first person are in the singular), but in *Foet.Form.*, the ratio of first person singular to plural is more balanced (60% of the first person is in the singular).³ One of the explanations for this variation in usage of first person

¹ Appendix C, Tables 7 and 8.

² Appendix C, Tables 7 and 8.

³ Appendix C, Table 7.

plural and singular is the unique aim of each genre. As was pointed out, Galen almost exclusively uses the first person singular in *Lib.Prop.* to emphasize his authorship, i.e. *ego-auctor*. However, the aim in *Foet.Form.* is to provide his definitive demonstration of a subject to an audience of his peers. Thus, the first person plural appears more in this text because it is being used both as a colloquial way of lecturing to an audience on a subject (i.e. ‘let us now move to...’) and a means to indicate his position within a scientific community (i.e. anatomists versus philosophers). In both cases, the use of the first person plural and singular, plays a role in influencing the audience’s perception of the author and his message.

The effect that the genre has upon the presence of the author and audience can also be observed in the differences between the occurrences of the first and second person in the prefatory remarks versus the body of the text. Our best example of this is Book 1 of *HNH*, which has an extremely long preface with a range of topics. In the prefatory remarks, the frequency of occurrence of the first person is 0.84% and the second person is 0.65%.⁴ In the body of the text, the frequency of occurrence of the first person is 0.58% and the second person is 0.11% (This count is naturally restricted to Galen’s exegetical remarks and not the *lemmata*).⁵ Thus, one observes that the exegetical act is, for Galen, a less personal affair than the introduction of the text.

One also observes a difference in the way in which the first person is used in respect to the prefatory remarks and the body of the text. In the preface to Book 1 of *HNH*, 43% of his use of the first person is in the plural.⁶ However, in the body of *HNH*, the plural form makes up 82% of the use of the first person, almost twice as much as the preface.⁷ Perhaps this phenomenon is a result of the communicative nature of the exegesis. In other words, the reading of a Hippocratic text was a semi-public, didactic affair in which the teacher interprets for his student–disciples. Thus, Galen’s use of the first person may reflect the communicative dynamics between a teacher and his adherents. However, this needs to be verified by comparative analyses of Galen’s commentaries.

Another point of contrast is in respect to Galen’s author–audience orientedness in *Thras.* versus *Foet.Form.* While both works are types of scientific inquiry, *Thras.* exhibits a greater attentiveness to the social aspects of inquiry by Galen’s use of the second person and the first person plural. In *Thras.*, the frequency of occurrence of the second person is 0.33% of the total word count⁸ as opposed to *Foet.Form.*, where it is 0.01% of the total word count.⁹ In

⁴ Appendix C, Table 1.

⁵ Appendix C, Table 2.

⁶ Appendix C, Table 3.

⁷ Appendix C, Table 3.

⁸ Appendix C, Table 2.

Thras., 61% of the occurrences of the first person are in the plural.¹⁰ In *Foet.Form.*, the first person plural makes up 40% of the occurrences of the first person.¹¹ These differences may be explained by the emphasis on the social aspect of dialectical discourse that Galen conveys in *Thras.*

Although ratios and percentages of first and second person usage are useful in seeing gross changes between the different texts analyzed in this study, the way in which they occur conveys nuances of decorum. The under-translated interjection, εἰ βούλει, is an example of this. This interjection frequently occurs in the Galenic Corpus at instances in which Galen is trying to advance his argument by making a generalization or an analogy. As was noted, this interjection appears in *Thras.* but not in *Foet.Form.*, *Lib.Prop.*, *Puls.* or *HNH*. The absence of the term in *Foet.Form.*, a work which also addresses a subject in a very detailed and analytical method, reveals that such interjectory remarks are utilised for rhetorical effect. In *Thras.*, these types of interjections convey an awareness of the audience as fellow investigators into a speculative question. In *Foet.Form.*, Galen's refutation of the theories of others and his demonstration of the 'true' nature of the subject take precedence over projecting his interaction with the audience.

Whether the points of comparison and contrast presented in this section hold true for other works in the Galenic Corpus needs to be confirmed by a similar analysis which also takes into consideration chronological determinants which could possibly account for some of Galen's particular use of language such as idioms and phraseology.

II. Authorial personae and the scientific self

Galen's scientific persona is more nuanced than the philosopher/medical practitioner dichotomy.¹² In *Thras.*, Galen portrays himself as a logician who is able to dialectically answer 'every' *problema*. In *Foet.Form.*, Galen's persona is more 'empiric-scientific' and less 'philosophical' in character. Thus, he emphasizes that there are some things that simply cannot be known for sure, and in such matters, he is unwilling to run headlong into speculation as philosophers do. While one might attribute his caution to maturity of thought, his reluctance to move beyond what he considers scientific proofs is clearly part of his overall rhetorical strategy to undermine the epistemological value of philosophical accounts on the

⁹ Appendix C, Table 2.

¹⁰ Appendix C, Table 7.

¹¹ Appendix C, Table 7.

¹² Here I am speaking to the two broad Galenic '*profili*' of medicine that are discussed in Vegetti 1994.

soul. In *Lib.Prop.*, Galen's autobiographical anecdotes create an image of a transcendent thinker whose works, therefore, should be preserved and studied. To emphasize the technical value of his approach to the pulse, Galen presents himself as a skilled practitioner rather than a theoretician. And, in *HNH*, Galen is careful to create a philological persona, as well as a medical one, in order to reassure his audience that he has total command of the source text. In *Protr.*, Galen projects himself as a witty moralist to his ideal audience of youths. All of these different personae are explicitly linked to his concept of his professional identity. Thus, for Galen, the best physician is also a philosopher, philologist, scientist, practitioner, orator and whatever else the rhetorical situation warrants.

Although Galen is adaptable to the rhetorical situation, he often exhibits an awareness of his scientific self. For example, through his explicit reticence to use less than 'scientific' evidence to convey his arguments in *Protr.* and *Thras.*, he conveys his deep commitment to seeking the truth. In these works, he allows himself to engage in such non-scientific discourses by indicating that he is responding to the demands of the situation. In *Thras.*, he excuses himself for using etymological evidence by portraying himself responding to a criticism from his audience concerning his use of terms. And, in *Protr.*, Galen excuses his use of poets as evidence by claiming that he is simply responding in a like manner to his opponent's rhetorical arguments. Thus, in both of these works, the addressees are used in a rhetorical fashion to allow Galen to engage in non-scientific discourse without compromising his scientific self.

Another way in which Galen projects his scientific self is by contrasting himself with others. In *Foet.Form.*, Galen situates himself among anatomists to illustrate the distinct type of evidence he brings to the problem of the formation of the embryo and its relationship to the soul. In *HNH*, Galen's scientific community obviously consists of exegetes who have commented upon *Nat.Hom.* While he does indicate his philological expertise through his exegesis of particular passages, he primarily tries to illustrate his superiority over other exegetes by emphasizing his medical interests and proficiency. Of course, his primary point of contrast in many of these works is between himself and those who are interested more in eristics than seeking the truth of a matter, i.e. sophists.

III. Historical and ideal audience/dedicatee and addressee

These works reveal some of the different audiences to whom Galen wrote. In respect to his ideal audiences, Galen writes to a rather diverse set of individuals and groups. In *Protr.*,

Galen portrays himself speaking to a group of youths who are at the critical stage of deciding what to do with their lives. In *HNH*, Galen projects himself writing a commentary for a group of ἑταῖροι who are unfamiliar with *Nat.Hom.* but are quite familiar with Galen's teachings. The ideal audience in *Puls.* are εἰσαγόμενοι to the medical practice of using the pulse for prognostication. In contrast to these medical practitioners, Galen indicates, in *Thras.*, that this work will be beneficial to a group of ἑταῖροι, who are interested in the application of Galen's logical theories. In *Lib.Prop.*, he indicates that he is writing for the benefit of his future reader. Thus, Galen is quite explicit as to his ideal audience, and the language, content and argumentation of each of these works seem appropriate to the ideal audience for whom Galen is writing. However, because Galen is less forthcoming as to the ideal audience in *Foet.Form.*, all that can be ascertained from Galen's approach to the ideal audience is that they are familiar with his writings and fully capable of following his logic.

Galen's approach to the dedicatee, addressee, and ideal audience sometimes reveals that these 'audiences' are rhetorical figures who speak to an audience, i.e. the historical audience behind the ideal audience. In Galen's epistolary proem to *Lib.Prop.*, *Thras.* and *HNH*, his remarks to the dedicatee often are designed to convey his scientific ethos, thereby ingratiating himself to the audience. In the case of *Lib.Prop.*, the dedicatee's 'request' that Galen write this auto-bibliographical work shields him from his reader's potential criticisms for his περιαυτολογία.

Galen's posture toward the addressee also differs from genre to genre. In some cases the addressee becomes an integral part of the discourse. For example, in *Protr.* the addressee becomes the straw man for Galen's arguments against athletic training, while in *Thras.*, Galen paints the addressee as a necessary interlocutor. In other places within these texts, the addressee is nothing more than a hypothetical 'you' used to present an argument.

Thus, like many authors, when Galen composed a work, he consciously and subconsciously wrote for more than one audience. The ideal audience provides Galen with an excuse to launch into critical attacks on his opponents. In these cases, Galen suggests that he is protecting the ideal audience from being misled by false teachers. In this respect, the ideal audience can be seen as a type of rhetorical device. In regard to the historical audience, there are a few instances where we have evidence concerning the reception of Galen's writings.¹³ Nevertheless, Galen's rhetorical use of the ideal audience in some of these works reveals that he is accommodating his communication toward actual people external to the text. That is not to say that the ideal audience is unhistorical. Certainly, for Galen's works to be persuasive,

¹³ Nutton 1988.

the ideal audience (i.e. the audience in the text) must be representative of the types of social interactions in which a physician, such as Galen, would engage. Therefore, in this study, we have observed that Galen's writings are both esoteric and exoteric; for beginners and experts; for practitioners and theorists; and for youths and adults.

IV. Organizing principles and stylistic register

Several organizing principles were observed in this study. In *Lib.Prop.*, Galen has modified the traditional model of writing a *bios* and attaching a list of titles by an author. In *Protr.*, the common formula of *synkrisis* (i.e. comparing the moral with the immoral) is employed. *HNH* is a work in which he adjusts his basic structural unit (i.e. the lemma and comment), as well as the paratextual features, of this genre to represent his perception of the received text. In *Puls.*, the organizing principle is more topic-related, but one can appreciate its analytical approach to teaching an art. *Foet.Form.* and *Thras.* share some similarities in the manner in which they illustrate the *diairesis* of the problem, and to some extent, *Foet.Form.* shares *Thras.*'s process of confirmation and refutation of a position. However, in *Thras.*, all of the topics are linked by an analytical method. *Foet.Form.* does not employ an analytical method to illustrate the connection between various propositions; rather, it utilizes other modes of structuring the argument. That is, *Foet.Form.* structures a collection of topics related to the formation of the embryo according to the evidence and the epistemological certainty of the proofs.

The selection of works in this study illustrates the range of Galen's stylistic register. *Protr.*, is a work that is overtly epideictic. In it, one observes Galen using witticisms, tropes and vivid language and quoting heavily from poetic literature to display his erudition. *Thras.* is a complex work in that Galen has mated the language of analytical logic to his portrayal of the process of dialectical discourse. Although he claims to be simply recounting what he had previously shown in a dialectical inquiry, Galen uses an interlocutory-you and the present tense to create the perception that he is working through the problem extemporaneously. Thus, in *Protr.* and *Thras.*, he conveys the orality of these distinct types of communicative events with quite different language. At the other end of the spectrum is *Puls.* In this work, Galen's tone becomes more informative and less argumentative. In *Puls.*, the language is not ornate but technical. One can discern a utilitarian approach to syntax in the way in which Galen signposts changes in subject with his formulaic phraseology. All of this conveys the pragmatic nature of this work.

V. Scientific evidence and theoretical explanation

As was noted, in *PHP*, Galen puts forward the theoretical position that there are four types of premisses: the most epistemologically secure being scientific (ἐπιστημονική), followed by dialectic (διαλεκτική), rhetorical (ῥητορική) and sophistic (σοφιστική).¹⁴ These remarks should be understood as strictly applying to the premisses used in scientific demonstrations. In practice, depending on the audience, genre and subject matter, Galen relies on different kinds of evidence to prove his point. In *Protr.*, he primarily uses the kind of plausible evidence he associates with ῥητορική, i.e. the *doxai* of poets and historians; in *Thras.*, logical premisses, as well as the *doxai* of physicians and philosophers, are predominantly employed to make his inquiry appear philosophical in nature; and in *Foet.Form.*, Galen makes it quite clear that his proofs are based on scientific premisses— anatomy and physiology—and therefore, his treatment of the subject is more veridical in comparison to the accounts of philosophers.

In *Thras.*, Galen is restricted to dialectical proofs because the subject matter cannot be proven via sense perception (i.e. it is not a physical object). However, in *Foet.Form.*, questions about the faculties and the order of formation of the parts of the embryo are ‘verifiable’ through anatomy and physiology. However, one cannot simply say that the subject matter determines the type of proof Galen uses. Although he makes similar claims as to the detrimental aspects of athletic training on a person’s health in *Thras.* and *Protr.*, the rhetorical arguments Galen uses in *Protr.* to demonstrate the pitfalls of athletic training differ from the analytical arguments he puts forward in *Thras.* In this way, Galen illustrates his awareness of the constraints and opportunities that these two different genre present. If Galen were to use the same types of detailed logical proofs in *Protr.* that he does in *Thras.*, he would have been seen as having transgressed the decorum of this non-scientific discourse. Thus, both the subject matter and genre play important roles in the type of evidence upon which Galen relies in a specific work.

Galen also adjusts his level of theoretical explanation to the genre he is using. In *HNH*, Galen limits his exegesis only to what he perceived to be pertinent to explaining the science behind a passage in the source text. Thus, theoretical explanations concerning different elemental theories occur in the same genre as his medical explanations regarding why the source text’s author is putting forward a particular regimen. While the types of theoretical explanations are quite varied in *HNH*, the level of detail in these accounts is similarly brief. In the case of isagogic discourse (*Puls.*), the simplified and practice-oriented explanation is what

¹⁴ Tieleman 1996, 12-37.

defines this genre in the Galenic Corpus. Here, Galen provides a stripped-down treatment of a subject, removing complicated theories of causation and restricting himself to the listing of the general theoretical principles, which is useful to the practice of this medical technique. In other words, pragmatic concerns take precedence over the depth of analysis. However, in *Foet.Form.* and *Thras.*, Galen aims at a complete and detailed treatment of a subject. In *Thras.*, the object is to investigate fully a specific question through a series of philosophical questions, whereas in *Foet.Form.* the objective is to demonstrate what can be known for certain about a subject.

The level of theoretical explanation is also determined by the level of understanding of his ideal audience. This is made quite explicit in the discussion of *Hipp.Elem.* and *HNH* in which Galen makes a distinction between the kinds of information he can provide. In the case of *Hipp.Elem.*, which is a work Galen identifies as a *πραγματεία*, one finds Galen supporting his exegeses of passages taken from *Nat.Hom.* with long and detailed scientific proofs. In contrast, *HNH*'s level of scientific explanation is far less detailed. The explicit reason Galen gives for this is that *Hipp.Elem.* was designed for someone who is already familiar with the contents of *Nat.Hom.* while *HNH* is for his ideal audience of newcomers to the source text but not to medicine in general. Likewise, Galen's ideal audience for *Puls.* are freshmen to the study of the pulse but not to medicine. Thus, in the case of *HNH* and *Puls.*, the ideal audience are those who are unfamiliar with the text/subject. Therefore, Galen does not try to engage these audiences with questions that require the audience to be more familiar with the subject matter.

In the case of *Thras.* and *Foet.Form.*, the ideal audience is able to follow a fuller and more theoretical account of the subject. Although they do not appear to be accomplished in the application of Galen's logical methods, in *Thras.* the ideal audience obviously has a level of competence in philosophical inquiry. However, Galen appears to make accommodations for them by making his rationale explicit for the various lines of inquiry he follows. In the case of *Foet.Form.*, Galen's ideal audience is difficult to ascertain. He appears to situate this discourse among other philosophers' and physicians' treatments of the subject. Hence, *Foet.Form.* is a work in which Galen presents definitive refutation and inquiry into the construction of the embryo to his colleagues, both practitioners and non-practitioners of medicine. Because his audience includes also those who are not versed in anatomy, Galen presents a detailed anatomical account of the embryo. Thus, by first providing his anatomical 'observations', Galen is now able to use this information for his apodeictic proofs. Therefore, even in full theoretical accounts, one can perceive how Galen accommodates his inquiry to the ideal audience's knowledge.

VI. Galen among his predecessors and contemporaries

Without making this section into a chapter, the following discussion presents some of the potential authors who could be considered in a comparative study that takes into consideration generic conventions. When the term 'rhetoric' is applied to Galen's writings, one often hears comments as to the egocentric and eristic nature of Galen's prose. This is unfortunate because, as we have seen, such evaluations do not engage in a serious consideration of his communicative repertoire. Another factor that has contributed to a poor understanding of Galen's communicative practices is the concept that the Galenic Corpus represents 'technical' writings and therefore, is somehow different from the oeuvres of polymaths such as Plutarch, many of whose writings are often viewed as 'literature'. However if one were merely to compare the lists of titles found in *Lib.Prop.* with those ascribed to Plutarch, it would become abundantly clear that the two authors shared a lot of common ground in their wide-ranging interests.

Galen's writings on moral philosophy, such as *Modesty*, *Slander* and *To What Extent the Esteem and Opinion of the Public is to be Taken into Account*, reveal that Galen is an author, like Plutarch, who had more than a passing interest in writing *moralia* literature.¹⁵ Furthermore, titles of Galenic works on rhetorical and grammatical education, such as *Whether the Texts of Ancient Comedy are a Worthwhile Part of the Educational Curriculum*, seem to resonate with the didactic themes of Plutarch's writings, e.g. *How a Young Man Should Study Poetry*. Likewise, when Plutarch writes on issues such as health (*De tuenda sanitate praecepta*) and natural philosophy (*Quaestiones naturales*), he becomes an interesting author of scientific works with whom to compare Galen. Nevertheless, Galen's aims in writing differ substantially from Plutarch's in that Galen is an author whose professional identity is quite evident in his writings, and whose commitment to what is and what is not epistemological plays a role in the arguments in which he engages. In this endeavour, Galen starts to appear more like Sextus Empiricus.

To whom else should we compare Galen's communicative techniques? While a large part of Galen's writings does pertain to the theoretical and practical application of medicine, one would be misled to compare Galen simply to other learned physicians of the 2nd century AD, such as Soranus. The ornamentation which Galen applies to *Protr.* is similar to the kinds of rhetorical techniques that orators of the 2nd century AD used to unite philosophy with rhetoric. In this respect, Galen may be compared with the orator cum philosopher Dio

¹⁵ *Lib.Prop.*, K. 19.45-46. Many of Galen's works on this theme no longer exist. Notable exceptions are *Aff.Dig.*; *Pecc.Dig.*; Walzer 1949; 1954; Boudon-Millot 2007.

Chrysostom. Yet, Galen's treatment of the genre of the thesis in *Thras.* is quite distinct from those of orator philosophers, such as Epictetus and Maximus of Tyre, in that Galen relies heavily on analytical language to make his thesis appear more logical than rhetorical. Certainly, when Galen is writing about the pulse, one can align him with physicians, such as Marcellinus and Soranus. But, when Galen moves into a refutation of other theories on the construction of the embryo, it again becomes difficult to pigeonhole him as a physician since philosophers such as Alexander of Aphrodisias also engage in similar scientific refutations and inquiries. Alexander, also presents an interesting author with whom to compare Galen's communicative practice in respect to scientific commentaries.

There is clearly a great need for future studies which compare the rhetorical strategies and generic conventions in the Galenic Corpus with those of the writings of other authors of the 1st and 2nd century AD. Such studies would not only provide a meaningful context in which to situate Galen's writings but they would also help illustrate the rhetoric of scientific discourse in the 2nd century AD. As is the case with all authors, Galen is both an individual and a product of his society. Therefore, as this thesis has demonstrated, Galen's communicative practices provide more than just information about the audience; *HNH*, *Foet.Form.*, *Lib.Prop.*, *Protr.*, *Thras.* and *Puls.* reveal much about him as an author-thinker-communicator.

Appendix A

Abbreviations of Galenic and Pseudo-Galenic Texts

The abbreviations used for the Galenic Corpus are from Hankinson's abbreviations in *The Cambridge Companion to Galen* (Hankinson, 2008, 391-397). The titles of Galenic works that are no longer extant and therefore do not appear in Hankinson's list can be found in Fichner's *Corpus Galenicum: Verzeichnis der galenischen und pseudogalenischen Schriften* (Fichner, 1997).

“?” indicates that the text is of doubtful authenticity

SECTION I: TEXTS PRINTED IN KÜHN	
Abbreviation	Title
AA	<i>De Anatomicis Administrationibus</i>
Adv.Jul.	<i>Adversus Julianum</i>
Adv.Lyc.	<i>Adversus Lycum</i>
Adv.Typ.Scr.	<i>Adversus Eos qui de Typis Scripserunt</i>
Aff.Dig.	<i>De Proprium Animi Cuiuslibet Affectuum Dignotione et Curatione</i>
Alim.Fac.	<i>De Alimentis Facultatibus</i>
An.Ut.	<i>An Animal Sit Quod in Utero Geritur</i>
Ant.	<i>De Antidotis</i>
Ars.Med.	<i>Ars Medica</i>
Art.Sang.	<i>An in Arteriis Sanguis Contineatur</i>
At.Bil.	<i>De Atra Bile</i>
Bon.Hab.	<i>De Bono Habitu</i>
Bon.Mal.Suc.	<i>De Bonis et Malis Alimentorum Sucis</i>
CAM	<i>De Constitutione Artis Medicae</i>
Cath.Med.Purg.	<i>Quos, Quibus Catharticis Medicamentis et Quando Purgare Oporteat</i>
Caus.Morb.	<i>De Causis Morborum</i>
Caus.Puls.	<i>De Causis Pulsuum</i>
Caus.Resp.	<i>De Causis Respirationis</i>
Caus.Symp.	<i>De Symptomatum Causis</i>
Com.Hipp.	<i>De Comate Secundum Hippocrate</i>
Comp.Med.Gen.	<i>De Compositione Medicamentorum per Genera</i>
Comp.Med.Loc.	<i>De Compositione Medicamentorum secundum Locos, I–XI</i>
Cris.	<i>De Crisibus</i>
Cur.Rat.Ven.Sect.	<i>De Curandi Ratione per Venae Sectionem</i>
Def.Med.	<i>Definitiones Medicae</i>
Di.Dec.	<i>De Diebus Decretoriis</i>
Diff.Feb.	<i>De Febrium Differentiis</i>
Diff.Puls.	<i>De Differentiis Pulsuum</i>

SECTION I: TEXTS PRINTED IN KÜHN (*cont.*)

<i>Diff.Resp.</i>	<i>De Difficultate Respirationis</i>
<i>Dig.Insomm.</i>	<i>De Dignotione ex Insomniis</i>
<i>Dig.Puls.</i>	<i>De Dignoscendibus Pulsibus</i>
<i>Fasc.</i>	<i>?De Fasciis</i>
<i>Foet.Form.</i>	<i>De Foetuum Formatione</i>
<i>Gal.Fasc.</i>	<i>Ex Galeni Commentariis De Fasciis</i>
<i>Gloss.</i>	<i>?Glossarium</i>
<i>Hipp.Alim.</i>	<i>In Hippocratis de Alimento</i>
<i>Hipp.Aph.</i>	<i>In Hippocratis Aphorismi</i>
<i>Hipp.Art.</i>	<i>In Hippocratis De Articulis</i>
<i>Hipp.Elem.</i>	<i>De Elementis ex Hippocrate</i>
<i>Hipp.Epid.</i>	<i>In Hippocratis Epidemiarum Libri, I–VI</i>
<i>Hipp.Fract.</i>	<i>In Hippocratis De Fracturis</i>
<i>Hipp.Hum.</i>	<i>In Hippocratis de Humoribus</i>
<i>Hipp.Off.Med.</i>	<i>In Hippocratis De Officina Medici</i>
<i>Hipp.Prog.</i>	<i>In Hippocratis Prognosticum</i>
<i>Hipp.Prorrh.</i>	<i>In Hippocratis de Praedictionibus</i>
<i>Hipp.Vict.</i>	<i>In Hippocratis de Salubri Victus Ratione</i>
<i>Hipp.Vict.Morb.Ac.</i>	<i>De Victus Ratione in Morbis Acutis ex Hippocratis Sententia</i>
<i>Hist.Phil.</i>	<i>Historia Philosopha</i>
<i>HNH</i>	<i>In Hippocratis de Natura Hominis</i>
<i>HRCIS</i>	<i>De Hirundinibus, Revulsione, Cucurbitula Incisione et Scarificatione</i>
<i>Hum.</i>	<i>De Humoribus</i>
<i>HVA</i>	<i>In Hippocratis de Acutorum Morborum Victu</i>
<i>Inaeq.Int.</i>	<i>De Inaequali Intemperie</i>
<i>Inst.Od.</i>	<i>De Instrumento Odoratus</i>
<i>Int.</i>	<i>Introductio seu Medicus</i>
<i>Lib.Prop.</i>	<i>De Libris Propriis</i>
<i>Loc.Aff.</i>	<i>De Locis Affectis</i>
<i>Marc.</i>	<i>De Marcore</i>
<i>Mel.</i>	<i>De Melancholia</i>
<i>MM</i>	<i>De Methodo Medendi</i>
<i>MMG</i>	<i>Ad Glauconem de Methodo Medendi</i>
<i>Morb.Diff.</i>	<i>De Morborum Differentiis</i>
<i>Morb.Temp.</i>	<i>De Morborum Temporibus</i>
<i>Mot.Musc.</i>	<i>De Motu Musculorum</i>
<i>Musc.Diss.</i>	<i>De Musculorum Dissectione</i>
<i>Nat.Fac.</i>	<i>De Naturalibus Facultatibus</i>
<i>Nerv.Diss</i>	<i>De Nervorum Dissectione</i>
<i>Opt.Corp.Const.</i>	<i>De Optima Corporis Nostri Constitutione</i>
<i>Opt.Doct.</i>	<i>De Optima Doctrina</i>
<i>Opt.Med.</i>	<i>Quod Optimus Medicus sit quoque Philosophus</i>

SECTION I: TEXTS PRINTED IN KÜHN (cont.)

<i>Opt.Sect.</i>	<i>De Optima Secta</i>
<i>Ord.Lib.Prop.</i>	<i>De Ordine Librorum Propriorum</i>
<i>Oss.</i>	<i>De Ossibus ad Tirones</i>
<i>Parv.Pil.</i>	<i>De Parvae Pilae Exercitio</i>
<i>Pecc.Dig.</i>	<i>De Animi Cuiuslibet Peccatorum Dignotione et Curatione</i>
<i>PHP</i>	<i>De Placitis Hippocratis et Platonis</i>
<i>Plen.</i>	<i>De Plentitudine</i>
<i>Pond.Mens.</i>	<i>De Ponderibus et Mensuris</i>
<i>Praen.</i>	<i>De Praenotione ad Epigenem</i>
<i>Praes.</i>	<i>De Praenotione</i>
<i>Praes.Puls.</i>	<i>De Praesagitione ex Pulsibus</i>
<i>Praes.Ver.Exp.</i>	<i>De Praesagitione Vera et Experta</i>
<i>Prog.Dec.</i>	<i>Prognostica de Decubitu ex Mathematica Scientia</i>
<i>Protr.</i>	<i>Protrecticus</i>
<i>Ptis.</i>	<i>De Ptisana</i>
<i>Puer.Epil.</i>	<i>Puero Epileptico Consilium</i>
<i>Puls.</i>	<i>De Pulsibus ad Tirones</i>
<i>Puls.Ant.</i>	<i>De Pulsibus ad Antonium</i>
<i>Purg.Med.Fac.</i>	<i>De Purgantium Medicamentorum Facultate</i>
<i>QAM</i>	<i>Quod Animi Mores Corporis Temperamenta Sequuntur</i>
<i>Qual.Incorp.</i>	<i>Quod Qualitates Incorporeae Sint</i>
<i>Rem.</i>	<i>?De Remediis Parabilibus</i>
<i>Ren.Aff.</i>	<i>De Renum Affectibus</i>
<i>San.Tu.</i>	<i>De Sanitate Tuenda</i>
<i>Sect.Int.</i>	<i>De Sectis ad eos qui Introducuntur</i>
<i>Sem.</i>	<i>De Semine</i>
<i>Sim.Morb.</i>	<i>Quomodo Simulantes Morbum Deprehendendi</i>
<i>SMT</i>	<i>De Simplicium Medicamentorum [Temperamentis Ac] Facultatibus, I–XI</i>
<i>Soph.</i>	<i>De Sophismatibus penes Dictionem</i>
<i>Sub.Nat.Fac.</i>	<i>De Substantia Facultatum Naturalium</i>
<i>Suc.</i>	<i>?De Succedaneis</i>
<i>Symp.Diff.</i>	<i>De Symptomatum Differentiis</i>
<i>Syn.Puls.</i>	<i>?Synopsis de Pulsibus</i>
<i>Temp.</i>	<i>De Temperamentis</i>
<i>Ther.Pamph.</i>	<i>De Theriaca ad Pamphilianum</i>
<i>Ther.Pis.</i>	<i>De Theriaca ad Pisonem</i>
<i>Thras.</i>	<i>Thrasylbus Sive Utrum Medicinae Sit an Gymasticae Hygiene</i>
<i>Tot.Morb.Temp.</i>	<i>De Totius Morbi Temporibus</i>
<i>Trem.Palp.</i>	<i>De Tremore, Palpitatione, Convulsione et Rigore</i>
<i>Tum.Pr.Nat.</i>	<i>De Tumoribus Praeter Naturam</i>
<i>Typ.</i>	<i>De Typis</i>

SECTION I: TEXTS PRINTED IN KÜHN (*cont.*)

<i>Ur.</i>	<i>De Urinis</i>
<i>Ur.Comp.</i>	<i>De Urinis Compendium</i>
<i>Ur.Hipp.Gal.</i>	<i>De Urinis ex Hippocrate, Galeno</i>
<i>Us.Puls.</i>	<i>De Usu Pulsuum</i>
<i>Ut.Diss.</i>	<i>De Uteri Dissectione</i>
<i>Ut.Resp.</i>	<i>De Utilitate Respirationis</i>
<i>Ven.</i>	<i>De Venereis</i>
<i>Ven.Art.Diss.</i>	<i>De Venarum Arteriarumque Dissectione</i>
<i>Ven.Sect.</i>	<i>De Venae Sectione</i>
<i>Ven.Sect.Er.</i>	<i>De Venae Sectione adversus Erasistratum</i>
<i>Ven.Sect.Er.Rom.</i>	<i>De Venae Sectione adversus Erasistrateos Romae Degentes</i>

SECTION II: TEXTS NOT PRINTED IN KÜHN

Abbreviation	Title
<i>AA</i>	<i>De Anatomicis Administrationibus (Books 9–14)</i>
<i>CC</i>	<i>De Causis Contentivis</i>
<i>CP</i>	<i>De Causis Procatarcticis</i>
<i>Cons.</i>	<i>De Consuetudine</i>
<i>Di.Hipp.Morb.Ac.</i>	<i>De Diaeta Hippocratis in Morbis Acutis</i>
<i>Med.Exp.</i>	<i>De Experientia Medica</i>
<i>Hipp.Off.Med.</i>	<i>In Hippocratis de Officio Medici</i>
<i>Inst.Log.</i>	<i>Institutio Logica</i>
<i>Med.Nam.</i>	<i>De Nominibus Medicis</i>
<i>Opt.Med.Cogn.</i>	<i>De Optimo Medico Cognoscendo</i>
<i>Part.Art.Med.</i>	<i>De Partibus Artibus Medicativae</i>
<i>Part.Hom.Diff.</i>	<i>De Partium Homoeomerum Differentiis</i>
<i>Plat.Tim.</i>	<i>In Platonis Timaeum</i>
<i>Prop.Plac.</i>	<i>De Propriis Placitis</i>
<i>Subf.Emp.</i>	<i>Subfiguratio Empirica</i>
<i>Vict.At.</i>	<i>De Victu Attenuante</i>

Appendix B

Analytical Outlines of Galenic Texts

Chapter 1: *De libris propriis*

B. = Boudon-Millot, V. 2007. *Galien: Sur ses propres livres*. Paris: Les Belles Lettres, 134–173 ≈ K. 19.8–48.

N.B. There are large lacunae in Kühn's edition of *Lib.Prop.* which have been recently filled with the discovery of manuscript *Vlatadon* 14 and its incorporation into Boudon's edition.

- I. Prologue (B. 134.2–136.22 = K. 19.8.3–11.11)
- II. Chronological presentation of his works within an autobiographical and bibliographical narrative (B. 136.23–145.25 = K. 19.11.12–23.8)
 - A. Works written during his first stay in Rome (B. 136.23–140.8 = K. 19.11.12–16.5)
 - B. Works he had previously written and received when he returned to Pergamum (B. 140.9–141.15 = K. 19.16.6–17.15)
 - C. Works written after his return to Rome (B. 141.16–145.25 = K. 19.17.15–23.8)
- III. Thematic categories of works (B. 145.26–173.15 ≈ K. 19.23.9–48.16)
 - A. Works on anatomical theory (B. 145.26–154.15 ≈ K. 19.23.10–30.4)

**An order of reading given*

 1. Necessary works (ἀναγκαῖα) (B. 145.27–147.13 ≈ K. 19.23.10–25.5)
 2. Useful works (χρήσιμα) (B. 147.13–154.15 ≈ K. 19.25.5–30.4)
 - B. The faculties and use of the parts made manifest by anatomy contained in certain works (B. 154.16–155.12)

**An order of reading given*
 - C. Works for the understanding of the therapeutic method (B. 155.13–156.11)

**An order of reading given*
 - D. Therapeutics (B. 157.1–22 ≈ K. 19.30.14–32.18)
 - E. Works on prognostic observations (B. 158.1–159.8 = K. 19.30.5–33.13)

**An order of reading given with an explanation of his isagogic strategy*
 - F. Commentaries on Hippocrates (B. 159.9–162.11 = K. 19.33.14–37.9)
 1. Bibliographical information concerning his commentaries in a narrative format (B. 159.9–161.15 = K. 19.33.14–36.12)
 2. His other Hippocratic scholarship (B. 161.15–162.11 = K. 19.36.12–37.9)
 - G. Works expressing differences with Erasistratus (B. 162.12–163.3 = K. 19.37.10–38.5)
 - H. Works relevant to Asclepiades (B. 163.4–163.7 = K. 19.38.6–38.8)

- I. Works expressing differences with the Empiric doctors (B. 163.8–163.17 = K. 19.38.9–38.16)
- J. Works expressing differences with the Methodists (B. 163.18–163.20 = K. 19.38.17–38.19)
- K. Works of use for logical proofs (B. 164.1–169.12 = K. 19.39.1–45.8)
**An order of reading given*
 - 1. Autobiographical and bibliographical narrative (B. 164.2–167.14 = K. 19.39.1–43.10)
 - 2. List of works (B. 167.14–169.12 = K. 19.43.11–45.8)
- L. Works on moral philosophy (B. 169.13–170.13 = K. 19.45.9–46.10)
- M. Works pertaining to the philosophy of Plato (B. 170.14–171.5 = K. 19.46.11–46.19)
- N. Works pertaining to the philosophy of Aristotle (B. 171.6–172.2 = K. 19.47.1–47.10)
- O. Works expressing differences with the philosophy of the Stoics (B. 172.3–172.11 = K. 19.47.11–47.17)
- P. Works pertaining to the philosophy of Epicurus (B. 172.12–173.4 = K. 19.48.1–48.7)
- Q. Matters common to grammarians and rhetoricians (B. 173.5–173.15 = K. 19.48.8–48.16)

Chapter 2: No outline of *HNH* and *Hipp. Vict.*

M = Mewaldt, I. 1914. *Galenī In Hippocratis De natura hominis commentaria tria*. Vol. V 9.1, CMG. Leipzig: Teubner, 1–113 = K. 15.1–223.

Chapter 3: *Exhortatio ad medicinam*

B. = Boudon, V. 2002. *Galien: Exhortation à l'étude de la médecine*. Paris: Les Belles Lettres, 84–117 = K. 1.1–39.

- I. The value of τέχνηαι (B. 84.3–99.22 = K. 1.1.5–20.3)
 - A. *Exordium*: Mankind and the arts (B. 84.3–85.15 = K. 1.1.5–3.4)
 - 1. Unlike animals, mankind is able to learn new arts. (B. 84.3–85.1 = K. 1.1.5–2.7)
 - 2. Unlike animals, mankind practices both the bestial (manual) and the divine (rational) arts. (B. 85.1–85.15 = K. 1.2.7–3.4)
 - B. Τέχνη versus Τύχη (B. 85.16–90.18 = K. 1.3.5–9.5)

1. The image and character of Fortune (Τύχη) (B. 85.16–87.2 = K. 1.3.5–4.14)
 - a. Images of Fortune display her wretchedness and instability. (B. 85.16–86.5 = K. 1.3.5–3.14)
 - b. The capricious character of Fortune (B. 86.5–87.2 = K. 1.3.14–4.14)
2. The image and character of Hermes, the god of ἑρμῆς (B. 87.3–18 = K. 1.4.15–5.12)
 - a. Images of Hermes display his foresight and stability. (B. 87.3–13 = K. 1.4.15–5.7)
 - b. The benevolent providence of Hermes (B. 87.13–18 = K. 1.5.7–5.12)
3. The followers of Fortune (B. 87.19–88.18 = K. 1.5.13–6.14)
 - a. Men made famous by their reversals of fortune (B. 87.19–88.11 = K. 1.5.13–6.8)
 - b. The shameful character of Fortune's followers (B. 88.12–88.18 = K. 1.6.8–6.14)
4. The followers of Hermes (B. 88.19–90.18 = K. 1.6.15–9.5)
 - a. The honourable character and good life of Hermes' followers (B. 88.19–89.18 = K. 1.6.15–8.3)
 - b. Famous followers of Hermes (B. 89.18–90.18 = K. 1.8.3–9.5)
- C. The inferior and ephemeral goods of Fortune (B. 91.1–99.22 = K. 1.9.6–20.3)
 1. Wealth (B. 91.1–92.21 = K. 1.9.6–1.11.11)
 - a. The pursuit and reliance on wealth does not lead to caring for one's soul. (B. 91.1–92.4 = K. 1.9.6–10.13)
 - b. Those who rely on wealth are useless and worthless without their wealth. (B. 92.5–21 = K. 1.10.13–11.11)
 2. Noble birth (B. 93.1–96.2 = K. 1.11.12–15.8)
 - a. Noble birth is not obtained through effort. (B. 93.1–12 = K. 1.11.12–12.7)
 - b. Noble birth is only of value if it drives one to live up to one's ancestors' excellence. (B. 93.13–94.15 = K. 1.12.7–13.10)
 - c. Examples of illustrious men who came from lowly births (B. 94.16–96.2 = K. 1.13.10–15.8)
 3. Youthful beauty (B. 96.3–98.17 = K. 1.15.9–18.11)
 - a. Youth is a time when a young man should educate himself in order to prepare for old age. (B. 96.3–97.8 = K. 1.15.9–16.16)
 - b. It is shameful for a young man to be a useless beauty. (B. 97.8–97.22 = K. 1.16.16–17.12)

- c. Using one's youthful beauty to make money is not honourable. (B. 97.22–98.17 = K. 1.17.12–18.11)
 - 4. Conclusion (B. 98.18–99.22 = K. 1.18.12–20.3)
 - a. Wealth, noble birth and beauty should not keep one from learning an art.
- II. The vocation of athletics (τὸ τῶν ἀθλητῶν ἐπιτήδευμα) is not a τέχνη (B. 100.1–117.18 = K. 1.20.4–39.10)
 - A. Warns audience of false arts (B. 100.1–102.11 = K. 1.20.4–22.16)
 - 1. Athletics is a false art which needs to be examined. (B. 100.1–101.1 = K. 1.20.4–21.3)
 - 2. Athletics is not a divine skill but something more akin with animals. (B. 101.1–102.11 = K. 1.21.3–22.16)
 - B. Galen's refutation of his opponent's arguments for athletics (B. 102.23–116.19 = K. 1.23.1–38.9).
 - 1. Galen criticizes the rhetorical nature of his opponent's arguments. (B. 102.12–105.22 = K. 1.23.1–26.16)
 - 2. Galen's assesses athletics in respect to the natural goods (τὰ ἀγαθὰ τῇ φύσει): the soul (ψυχῇ), the body (σῶμα) and the external (ἐκτός). (B. 106.1–116.19 = K. 1.26.17–38.9)
 - a. Soul: Athletics makes one's mind like that of the beasts. (B. 106.1–11 = K. 1.26.17–27.10)
 - b. Body: Athletics is unhealthy, destroys the beauty of the body and does not produce useful or superior strength. (B. 106.11–115.15 = K. 1.27.10–37.4)
 - i. Health (B. 106.11–109.21 = K. 1.27.10–31.13)
 - A. Excessive exercise encourages immoderate eating and sleeping. (B. 106.11–108.4 = K. 1.27.10–29.2)
 - B. The peak condition of the body leads to disease and a dilapidated body. (B. 108.5–109.21 = K. 1.29.2–31.13)
 - ii. Beauty (B. 110.8–111.7 = K. 1.31.14–32.12)
 - A. Athletics grossly disfigures young men's faces and limbs. (Ibid.)
 - iii. Strength (B. 111.8–115.15 = K. 1.32.13–37.4)
 - A. Athletic strength is useless for the endeavours of life. (B. 111.8–114.4 = K. 1.32.13–35.11)
 - B. Athletes' physical abilities are inferior to that of the animals. (B. 114.5–115.15 = K. 1.35.12–37.4)
 - iv. External goods (B. 115.16–116.19 = K. 1.37.5–38.9)

- A. Athletics does not provide a secure livelihood for both practicing and retired athletes. (Ibid.)

III. Peroratio (B. 116.20–117.18 = K. 1.38.9–39.10)

- A. There are two types of arts. On the one hand, there are the logical and respected arts, which require the mind. On the other hand, there are the manual and base arts, which depend on bodily strength. (B. 116.20–117.14 – K. 1.38.9–39.6)
- B. Galen exhorts the audience to choose the rational arts, particularly medicine. (B. 117.14–117.18 = K. 1.39.6–39.10)

Chapter 4: *Thrasybulus sive utrum medicinae sit an gymnasticae hygiene*

H. = Helmreich, G. 1893. *Thrasyboulos*. Vol. 3, *Claudii Galeni Pergameni Scripta Minora*. Leipzig: Teubner, 33–100 = K. 5.806–898.

I. Epistolary proem (H. 33.1–36.7 = K. 5.806.4–810.13)

- A. Content of *Thras*. (H. 33.1–15 = K. 5.806.4–807.7)
- B. *Problema*, ‘Whether that which is called healthiness is a part of medicine or gymnastics?’ (πότερον ἰατρικῆς ἢ γυμναστικῆς ἐστὶ τὸ καλούμενον ὑγιεινόν;) and the circumstances surrounding Galen’s oral response (H. 33.16–35.11 = K. 5.807.8–809.9)
- C. Rationale for composing *Thras*. (H. 35.12–24 = K. 5.809.10–810.4)
- D. Benefits of logical theory (H. 35.25–36.7 = K. 5.810.5–13)

II. Survey of the possible starting points (ἀρχαί) for this inquiry (ζήτησις) (H. 36.8–44.17 = K. 5.810.14–821.17)

- A. ὀρίσμοί of medicine and gymnastics (H. 36.8–36.24 = K. 5.810.14–811.11)
1. Galen argues that definitions of medicine and gymnastics prejudice the inquiry.
- B. τέλη of medicine and gymnastics (H. 36.24–41.3 = K. 5.811.11–817.7)
1. Galen demonstrates how using the differing aims of medicine and gymnastics as a starting point leads to an unmanageable inquiry.
- C. οὐσίαι of medicine and gymnastics (H. 41.4–42.14 = K. 5.817.7–819.7)
1. Galen claims that how one defines the οὐσία of medicine or gymnastics will assume that τὸ ὑγιεινόν is part of the premise, and therefore, it creates problems for this inquiry.
- D. Galen concludes that there is a danger of beginning this inquiry with more than one art. (H. 42.16–44.17 = K. 5.819.8–821.17)

III. The art of the body (H. 44.18–76.17 = K. 5.821.18–867.2)

A. The oneness of the art of the body (H. 44.18–71.23 = K. 5.821.18–860.3)

1. τέλος (H. 44.18–49.6 = K. 5.821.18–828.9)
 - a. The false art of good condition (εὐεξία) is merely cosmetic. There is one overall τέλος of the art of the body—perfection (τελειότης) of the human body according to its nature.
2. ἀγαθόν (H. 49.7–53.18 = K. 5.828.10–834.16)
 - a. The good of the body should be considered one thing and not three different things, namely health (ὑγίεια), strength (ῥώμη) and beauty (κάλλος). Health is the primary product (τὸ πρῶτον) of the art of the body.
3. παράδειγμα (H. 53.19–55.3 = K. 5.834.17–836.17)
 - a. Within one material (ύλη) there are productive and reparative arts but no protective (φυλακτική) arts.
 - b. There is no example (παράδειγμα) of a preservative art among men. The nature of the subject itself (ἡ τῶν πραγμάτων αὐτῶν φύσις) reveals that the art of health is reparative rather than protective.
4. Digression concerning the value of logic and the teaching of *problemata* (H. 59.5–60.5 = K. 5.842.10–843.16)
5. ἐνέργειαι of the art (H. 60.6–69.11 = K. 5.842.4–856.13)
 - a. Within the art of medicine, there are many activities (ἐνέργειαι). Individual activities and materials do not necessitate that something is a distinct art.
 - b. Making and restoring something belong to the same art, and in the case of the human body, the goal of the art of the body is simply health; it is not “the making” or “the restoring” of health.
6. ὕλαι of the art (H. 69.12–70.11 = K. 5.856.14–858.2)
 - a. Individual arts use a wide variety of materials, and some arts share the same material. Thus, materials do not define an art.
7. θεωρήματα of the art (H. 70.11–20 = K. 8.858.2–11)
 - a. One cannot use theories to define an art because arts use a variety of theories, each with their own aim.
8. Conclusion (H. 70.21–71.23 = K. 858.12–860.3)
 - a. An art is defined by its τέλος, and therefore, it is clear that there is altogether one art of the body.

B. Defining the parts of the art of the body (H. 71.24–76.17 = K. 5.860.4–867.2)

1. Galen's διαίρεσις of the art of the body (H. 71.24–75.2 = K. 5.860.4–864.9)
 - a. Of the four types of arts, acquisitive (κτητική), theoretic (θεωρητική), active (πρακτική), and productive (ποιητική), the art of the body is a productive art.
 - i. Of the two types of productive arts, creative and restorative (ἐπανορθωτική), the practitioner of the art of the body is involved in the restorative art.
 - A. There are two parts (μέρη) of the restorative art: the therapeutic (θεραπευτικόν) or medical (ἰατρικόν) part, which addresses large imbalances, and the preservative (φυλακτικόν) or healthiness (ὑγιεινόν) part, which addresses small imbalances of the body.
 1. Of the preservative part, there are three different parts.
 - a. The recuperative (ἀναληπτικόν) part, which addresses small imbalances in state (κατὰ σχέσιν).
 - b. The healthiness (ὑγιεινόν) part, which addresses smaller imbalance in condition (καθ' ἑξιν).
 - c. The good condition (εὐεκτικόν), which deals with the smallest imbalances in good condition.
 2. Therefore, τὸ ὑγιεινόν is either the φυλακτικόν part of the art of the body or its subpart, namely the part that addresses smaller imbalance in condition. (H. 75.2–76.17 = K. 5.864.9–867.2)

IV. The names (ὀνόματα) and role of ἰατρική and γυμναστική in the art of the body (H. 76.18 – 98.4 = K. 5.867.3 – 896.3)

A. Common names of ἰατρική and γυμναστική

1. Galen responds to critics who demand a discussion of specific ὀνόματα of the art of the body and its parts. (H. 76.18–78.15 = K. 5.867.3–869.13)
2. ἰατρική and γυμναστική in the writings of Homer and Plato (H. 78.16–79.19 = K. 5.869.14–871.3)
3. The εὐεκτικόν part of the art uses exercise and regimen, which are associated with γυμναστική. (H. 79.20–80.8 = K. 871.4–871.17)
4. Γυμναστική is part of the healthy art (ὑγιεινὴ τέχνη), which is evident in the way Plato and Hippocrates use the term. (H. 80.9–81.21 = K. 872.1–874.3)

5. Although current athletic trainers (οἱ τοὺς ἀθλητὰς γυμνάζοντες) dignify their practice by calling it γυμναστική, it has nothing to do with what Hippocrates and Plato considered to be γυμναστική. (H. 81.22–83.11 = K. 5.873.4–876.3)
6. Galen digresses into an attack on athletic trainers. (H. 83.12–85.18 = K. 5.876.4–879.5).
7. Galen discusses how Plato and Erasistratus each divided the art of the body. (H. 85.19–87.5 = K. 5.879.6–881.7)
8. Why Plato and Hippocrates did not use the term ὑγιεινόν. (H. 87.6–88.4 = K. 5.881.1–882.12)

B. Role of ἰατρική and γυμναστική in the art of the body

1. Ἰατρικὴ τέχνη governs the therapeutic (θεραπευτικόν) or medical (ἰατρικόν) part of the art of the body, which is paired with the other major part, the preservative (φυλακτικόν) or (ὑγιεινόν) healthiness part. (H. 88.5–90.8 = K. 5.882.13–885.12)
2. Γυμναστική τέχνη is knowledge of all types of exercises, and therefore, it is only a very small part of the many arts used in the healthiness part. (H. 90.9–91.16 = K. 5.885.12–887.5)
3. Therefore, those who oppose γυμναστική with ἰατρική are in error because the former gets its name from the material (ὕλη) used, while the latter is an overall activity (ἡ κοθόλου ἐνέργεια). (H. 91.17–92.9 = K. 5.887.6–888.6)
4. The practitioner of γυμναστική merely has knowledge of all types of exercises; he does not prescribe them. (H. 92.10–94.5 = K. 5.888.7–890.17)
5. The practitioner of the art of the body is the overseer of the practitioner of γυμναστική. (H. 94.6–94.21 = K. 5.890.18–891.13)
6. The art of training a child (παιδοτριβική) is the art concerned with exercises in the *gymnasion*. The practitioner of this art is the servant of the practitioner of γυμναστική. (H. 94.22–96.18 = K. 5.891.14–894.2)
7. Galen digresses into a polemic concerning athletic trainers. (H. 96.19–98.4 = K. 5.894.2–896.3)

V. Conclusion

- A. The practitioner of the art of the body, such as Hippocrates, is often called an ἰατρός. The reason for this is because the whole art of the body, by extension of its major division, came to be known as ἰατρική. (H. 98.5–99.15 = K. 5.896.4–898.1)

- B. True γυμναστική, which athletic training is not, is merely a part of ὑγιεινόν rather than vice-versa. (H. 99.16–100.9 = K. 5.898.1–898.17)

Chapter 5: *De pulsibus ad tirones*

- I. Epistolary proem (K. 8.453.3–5)
- II. Anatomical locations of the pulse (K. 8.453.5–454.18)
- III. Dimensions of pulse (diastole) (K. 8.455.1–15)
- IV. The five differences in the motion of a pulse (K. 8.455.1–457.12)
- V. Even versus uneven/regular versus irregular pulses (4.857.13–458.18)
 - A. Interval as being the fifth difference in motion
 - B. Even versus uneven pulses
 - C. Regular versus irregular pulses
- VI. Irregularity within a single pulse (K.8.459.1–19)
 - A. Unevenness in position
 - B. Unevenness in motion
- VII. Composite types of pulses (K. 8.460.1–18)
 - A. Worming
 - B. Wavelike
 - C. Anting
 - D. Hectic
- VIII. Recapitulation of the information on dimensions and motions (K. 8.460.18–462.5)
- IX. The three categories by which pulses change (K. 8.462.6–492.4)
 - A. Natural changes (K. 8.462.6–467.17)
 1. Natural constitution
 2. Male versus female
 3. Time of life
 4. Seasonal
 5. Place
 6. Pregnancy
 7. Sleep
 8. Acquired states of the body (ectomorphic versus endomorphic)
 - B. Non-natural changes (K. 8.467.18–470.6)
 1. Exercise
 2. Hot and cold baths

3. Food

C. Unnatural changes (K. 8.470.7–492.4)

1. Two categories (K. 8.470.7–473.11)
 - a. Dissipates the vital faculty
 - b. Compresses and burdens the vital faculty
2. Specific causes/terms and the pulse (K. 8.473.11–492.4)
 - a. Emotions: anger, pleasure, grief, fear
 - b. Pain
 - c. Inflammation
 - d. Pleuritis
 - e. ‘Wasting’
 - f. Peripneumonia
 - g. Lethargy
 - h. Phrenitis
 - i. A disease resembling phrenitis and lethargy
 - j. Catalepsy
 - k. Convulsion
 - l. Paralysis
 - m. Epilepsy and apoplexy
 - n. Sore throat/synanche
 - o. Orthopnoea
 - p. Suffocation of the womb
 - q. Affection of the stomachos
 - r. Dropsy
 - s. Elephantiasis
 - t. Jaundice
 - u. Those who take hellebore

Chapter 6: *De foetuum formatione*

N. = Nickel, D. 2001. *Galenī De foetuum formatione*. Vol. V 3.3, CMG. Berlin: Akademie Verlag, 54–107 = K. 4.652–702.

I. Introduction to the subject (N. 54.3–58.2 = K. 4.652–655.5)

- A. Anatomy as the correct foundation of knowledge on the διαπλάσις of the κυούμενον (N. 54.3–9 = K. 4.652.3–10)

- B. Previous anatomical accounts (N. 54.9–58.2 = K. 4.652.10–655.5)
 - 1. Errors of predecessors' observations
 - 2. Hippocrates'/Polybus' accurate account
- II. Galen's observations of the initial διάπλασις of the ἔμβρυον (N. 58.3–62.24 = K. 4.655.5–660.4)
 - A. Anatomy of the external parts (N. 58.3–60.15 = K. 4.655.5–657.16)
 - B. Anatomy of the internal parts (N. 60.16–62.24 = K. 4.657.16–660.4)
- III. How does the subsequent διάπλασις of the κούμενον take place by the δύναμις of the σπέρμα? (N. 62.25–90.26 = K. 4.660.4–687.4)
 - A. Anatomical and physiological changes during the subsequent stages of construction of the κούμενον (N. 62.25–78.11 = K. 4.660.4–674.5)
 - 1. The vessels and the formation of the liver, heart, brain (N. 62.25–66.18 = K. 4.660.4–663.11)
 - 2. How is it possible that the heart has no function in the early stages of formation and that its construction comes after the liver? (N. 66.19–78.11 = K. 4.663.11–4.674.5)
 - a. Formation and management in a plant-like state (N. 66.19–70.16 = K. 4.663.11–667.6)
 - b. What is the limit of the first period, the plant-like state, in which the κούμενον does not need the heart? (N. 70.17–74.18 = K. 4.667.6–671.3)
 - c. The order of the formation of the liver, heart and brain as they relate to their function and the faculties of the ψυχή (N. 74.19–78.11 = K. 4.671.3–674.5)
 - B. Critique of cardio-centric theories of Stoic and Peripatetic philosophers (N. 78.12–82.9 = K. 4.674.6–678.8)
 - C. Other evidences for discovering the διοικούσας δυνάμεις of the body (N. 82.9–90.26 = K. 4.678.8–687.4)
 - 1. Evidence from the ligatures of arteries, veins and nerves (N. 82.20–84.6 = K. 4.679.4–680.1)
 - 2. Evidence from the substance of the arteries, veins and nerves (N. 84.7–84.24 = K. 4.680.1–681.6)
 - 3. Evidence from the size of the blood vessels leading to and from the heart, liver and brain (N. 84.25–86.17 = K. 4.681.6–682.12)
 - D. Conclusion to the overarching question (N. 86.17–90.26 = K. 4.682.12–687.4)
- IV. What is the αἰτία τοῦ κουμένου γενέσεως? (N. 90.27–106.13 = K. 4.687.5–702.4)

- A. Dismissal of Epicurean perspective that it occurs without πρόνοια (N. 92.11–23 = K. 4.688.2–17)
- B. Refutation of Stoic perspective of mechanistic determinism (N. 92.23–96.16 = K. 4.688.17–692.5)
- C. Refutation that the body's ψυχή constructs the embryo (N. 96.16–98.6 = K. 4.692.5–693.10)
- D. His state of ἀπορία as to the ψυχή that constructs the embryo (N. 98.7–106.1 = K. 4.693.10–701.7)
 - 1. Proposes only that the embryo's construction is not by τύχη but by a δημιουργός (N. 98.7–100.29 = K. 4.693.11–697.4)
 - 2. Problem of the διοίκουσα ψυχή's lack of knowledge of the parts which obey it (N. 100.30–102.9 = K. 4.697.4–19)
 - 3. Criticism of the untruthfulness of cardio-centric arguments (N. 102.9–102.26 = K. 4.697.19–699.3)
 - 4. Problem of offspring appearing similar to parents (N. 102.10–104.14 = K. 4.699.3–700.2)
 - 5. Reasons for his rejection of Stoic, Peripatetic and Platonic explanations as to the οὐσία of the ψυχή that constructs the embryo (N. 104.15–106.1 = K. 4.700.2–701.7)
- E. Conclusion (N. 106.1–13 = K. 4.701.7–702.4)

Appendix C

TABLE C.1

**NUMBER OF OCCURRENCES AND PERCENTAGE OF TOTAL WORD COUNT
FOR THE FIRST PERSON AND THE SECOND PERSON IN THE PREFATORY REMARKS**

	<i>HNHI</i>		<i>Foet. Form.</i>	<i>Lib. Prop.</i>		<i>Protr.</i>	<i>Thras.</i>		<i>Puls.</i>	
	No. of Occurr.	% of Total Word Count		No. of Occurr.	% of Total Word Count		No. of Occurr.	% of Total Word Count	No. of Occurr.	% of Total Word Count
1st Singular Pronoun/Adj.	4	0.13		11	2.36		7	1.17	0	0.00
1st Singular Verb	22	0.71		5	1.07		13	2.18	0	0.00
1st Plural Pronoun/Adj.	7	0.23		0	0.00		1	0.17	0	0.00
1st Plural Verb	13	0.42		0	0.00		3	0.50	0	0.00
2nd Singular Pronoun/Adj.	4	0.13		1	0.21		9	1.51	0	0.00
2nd Singular Verb	1	0.03		1	0.21		10	1.68	1	5.00
2nd Plural Pronoun/Adj.	4	0.13		0	0.00		1	0.17	0	0.00
2nd Plural Verb	1	0.03		0	0.00		0	0.00	0	0.00
TOTAL WORD COUNT	3,101			467			597		20	

TABLE C.2

**NUMBER OF OCCURRENCES AND PERCENTAGE OF TOTAL WORD COUNT
FOR THE FIRST PERSON AND THE SECOND PERSON IN THE BODY OF THE TEXT**

	<i>HNH I</i>		<i>Foet.Form.</i>		<i>Lib.Prop.</i>		<i>Protr.</i>		<i>Thras.</i>		<i>Puls.</i>	
	No. of Occurr.	% of Total Word Count	No. of Occurr.	% of Total Word Count	No. of Occurr.	% of Total Word Count	No. of Occurr.	% of Total Word Count	No. of Occurr.	% of Total Word Count	No. of Occurr.	% of Total Word Count
1st Singular Pronoun/Adj.	3	0.03	18	0.22	66	1.01	7	0.14	21	0.16	3	0.05
1st Singular Verb	8	0.08	44	0.43	80	1.23	17	0.33	50	0.38	4	0.07
1st Plural Pronoun/Adj.	21	0.20	27	0.26	3	0.05	6	0.12	21	0.16	5	0.08
1st Plural Verb	28	0.27	15	0.15	3	0.05	14	0.27	91	0.68	9	0.15
2nd Singular Pronoun/Adj.	1	0.01	0	0.00	0	0.00	3	0.06	9	0.07	4	0.07
2nd Singular Verb	7	0.07	1	0.01	0	0.00	35	0.68	34	0.26	5	0.08
2nd Plural Pronoun/Adj.	1	0.01	0	0.00	0	0.00	4	0.08	0	0.00	0	0.00
2nd Plural Verb	2	0.02	0	0.00	0	0.00	2	0.04	0	0.00	0	0.00
TOTAL	10,277		8,009		6,521		5,145		13,315		5,967	

TABLE C.3
NUMBER OF OCCURRENCES AND PERCENTAGE BREAKDOWN
OF THE FIRST PERSON IN THE PREFATORY REMARKS AND IN THE BODY OF THE TEXT

	<i>HNH I</i>		<i>Foet. Form.</i>		<i>Lib. Prop.</i>		<i>Protr.</i>		<i>Thras.</i>		<i>Puls.</i>	
	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text
1st Singular Pronoun/Adj.	4	3		18	11	66		7	7	21	0	3
1st Singular Verb	22	8		44	5	80		17	13	50	0	4
1st Plural Pronoun/Adj.	7	21		27	0	3		6	1	21	0	5
1st Plural Verb	13	28		15	0	3		14	3	91	0	9
1st Person Total	46	60		104	16	152		44	24	183	0	21
% First Person Singular	57%	18%		60%	100%	96%		55%	83%	39%	0%	33%
% First Person Plural	43%	82%		40%	0%	4%		45%	17%	61%	0%	67%

TABLE C.4
NUMBER OF OCCURRENCES AND PERCENTAGE BREAKDOWN
OF THE SECOND PERSON IN THE PREFATORY REMARKS AND IN THE BODY OF THE TEXT

	<i>HNHI</i>		<i>Foet. Form.</i>		<i>Lib. Prop.</i>		<i>Protr.</i>		<i>Thras.</i>		<i>Puls.</i>	
	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text	Prefatory Remarks	Body of Text
2nd Singular Pronoun/Adj.	4	1		0	1	0		3	9	9	0	4
2nd Singular Verb	1	7		1	1	0		35	10	34	1	5
2nd Plural Pronoun/Adj.	4	1		0	0	0		4	1	0	0	0
2nd Plural Verb	1	2		0	0	0		2	0	0	0	0
2nd Person Total	10	11		1	2	0		44	20	43	1	9
% Second Person Singular	50%	73%		100%	100%	0%		86%	95%	100%	100%	100%
% Second Person Plural	50%	27%		0%	0%	0%		14%	5%	0%	0%	0%

TABLE C.5
NUMBER OF OCCURRENCES OF THE FIRST PERSON IN THE PREFATORY REMARKS

	<i>HNH I</i>	<i>Lib.Prop.</i>	<i>Thras.</i>	<i>Puls.</i>
1st Singular Pronoun/Adj.	4	11	7	0
1st Singular Verb	22	5	13	0
1st Plural Pronoun/Adj.	7	0	1	0
1st Plural Verb	13	0	3	0
1st Person Total	46	16	24	0
% Singular	57%	100%	83%	0%
% Plural	43%	0%	17%	0%

TABLE C.6
NUMBER OF OCCURRENCES OF THE SECOND PERSON IN THE PREFATORY REMARKS

	<i>HNH I</i>	<i>Lib.Prop.</i>	<i>Thras.</i>	<i>Puls.</i>
2nd Singular Pronoun/Adj.	4	1	9	0
2nd Singular Verb	1	1	10	1
2nd Plural Pronoun/Adj.	4	0	1	0
2nd Plural Verb	1	0	0	0
2nd Person Total	10	2	20	1
% Singular	50%	100%	95%	100%
% Plural	50%	0%	5%	0%

TABLE C.7
NUMBER OF OCCURRENCES AND PERCENTAGE BREAKDOWN
OF THE FIRST PERSON IN THE BODY OF THE TEXT

	<i>HNH I</i>	<i>Foet. Form</i>	<i>Lib. Prop.</i>	<i>Protr.</i>	<i>Thras.</i>	<i>Puls.</i>
1st Singular Pronoun/Adj.	3	18	66	7	21	3
1st Singular Verb	8	44	80	17	50	4
1st Plural Pronoun/Adj.	21	27	3	6	21	5
1st Plural Verb	28	15	3	14	91	9
1st Person Total	60	104	152	44	183	21
% Singular	18%	60%	96%	55%	39%	33%
% Plural	82%	40%	4%	45%	61%	67%

TABLE C.8
NUMBER OF OCCURRENCES AND PERCENTAGE BREAKDOWN
OF THE SECOND PERSON IN THE BODY OF THE TEXT

	<i>HNH I</i>	<i>Foet.Form</i>	<i>Lib.Prop.</i>	<i>Protr.</i>	<i>Thras.</i>	<i>Puls.</i>
2nd Singular Pronoun/Adj.	1	0	0	3	9	4
2nd Singular Verb	7	1	0	35	34	5
2nd Plural Pronoun/Adj.	1	0	0	4	0	0
2nd Plural Verb	2	0	0	2	0	0
2nd Person Total	11	1	0	44	43	9
% Singular	73%	100%	0%	86%	100%	100%
% Plural	27%	0%	0%	14%	0%	0%

Works Cited

- Alexander, L. 1986. Luke's Preface in the Context of Greek Preface Writing. *Novum Testamentum* 28 (1): 48–74.
- . 1993. *The Preface to Luke's Gospel: Literary Convention and Social Context in Luke 1.1–4 and Acts 1.1*. Cambridge: Cambridge University Press.
- Allen, J. 'Pyrrhonism and Medical Empiricism: Sextus Empiricus on Evidence and Inference.' In *ANRW*, Vol. II.37.1, edited by Haase, W., Berlin: Walter de Gruyter, 1993, 646–690.
- Asper, M. 'Zu Struktur und Funktion eisagogischer Texte.' In *Gattungen wissenschaftlicher Literatur in der Antike*, edited by Kullmann, W., Althoff, J. and Asper, M., Tübingen: Gunter Narr Verlag, 1996, 309–340.
- . 'Un personaggio in cerca di lettore: Galens *Großer Puls* und die 'Erfindung' des Lesers.' In *Antike Fachtexte*, edited by Fögen, T., Berlin and New York: Walter de Gruyter, 2005, 21–40.
- . 2007. *Griechische Wissenschaftstexte. Formen, Funktionen, Differenzierungsgeschichten*. Stuttgart: Franz Steiner Verlag.
- Austin, J. L. 1962. *How to do Things with Words*. Oxford: The Clarendon Press.
- Bacalexi, D. 2001. De pulsibus ad tirones. Galien et les médecins débutants: le pouls comme moyen de diagnostic et de pronostic. *Bulletin de l'Association Guillaume Budé* (2): 131–152.
- Baltussen, H. 2007. From Polemic to Exegesis: The Ancient Philosophical Commentary. *Poetics Today* 28 (2): 247–281.
- Bardong, K. 1942. Beiträge zur Hippokrates- und Galenforschung. *Nachrichten von der Akademie der Wissenschaften in Göttingen* 7: 577–640.
- Barigazzi, A., ed. 1991. *Galeni De optimo docendi genere, Exhortatio ad medicinam*. Vol. V 1.1, CMG. Berlin: Akademie-Verlag.
- Barnes, J. 'Proof and Syllogism.' In *Aristotle on Science: The Posterior Analytics*, edited by Berti, E., Padua: Antenore, 1981, 17–59.
- . 'Galen on Logic and Therapy.' In *Galen's Method of Healing*, edited by Kudlien, F. and Düring, R. J., Leiden: Brill, 1991, 150–102.
- . 'Galen and the Utility of Logic.' In *Galen und das hellenistische Erbe*, edited by Kollesch, J. and Nickel, D., Stuttgart: Franz Steiner Verlag, 1993a, 33–52.

- . 'A Third Sort of Syllogism: Galen and the Logic of Relations.' In *Modern Thinkers and Ancient Thinkers*, edited by Sharples, R. W., London: Westview Pr, 1993b, 172–94.
- . 'An Introduction to Aspasius.' In *Aspasius: The Earliest Extant Commentary on Aristotle's Ethics*, edited by Alberti, A. and Sharples, R. W., Berlin: de Gruyter, 1999, 1–50.
- . 'Peripatetic Logic: 100 BC–200 AD.' In *Greek and Roman Philosophy 100 BC–200 AD*, edited by Sharples, R. W. and Sorabji, R., London: Institute of Classical Studies, 2007, 531–546.
- Bitzer, L. 1968. The Rhetorical Situation. *Philosophy and Rhetoric* 1: 1–14.
- Black, E. 1970. The Second Persona. *Quarterly Journal of Speech* 56: 109–119.
- Blum, R. 1991. *Kallimachos: The Alexandrian Library and the Origins of Bibliography*. Translated by Wellisch, H. H., Madison: The University of Wisconsin Press.
- Bylebyl, J. 1971. Galen on the Non-Natural Causes of Variation of the Pulse. *Bulletin of the History of Medicine* 45: 482–485.
- Bogan, S. M. I. 1968. *Saint Augustine: The Retractations*. Vol. 60. Washington: The Catholic University of America Press.
- Bonner, S. F. 1949. *Roman Declamation in the Late Republic and Early Empire*. Liverpool: Liverpool University Press.
- Boudon, V. 'Les oeuvres de Galien pour les débutants ('De sectis', 'De pulsibus ad tirones', 'De ossibus ad tirones', 'Ad Glauconem de methodo medendi' et 'Ars medica') : médecine et pédagogie au II s. ap. J.-C.' In *ANRW*, Vol. II.37.2, edited by Haase, W. and Temporini, H., Berlin: Walter de Gruyter, 1994, 1421–1467.
- . 'Galien par lui-même: les traités bio-bibliographiques.' In *Studi su Galeno: scienza, filosofia, retorica e filologia*, edited by Manetti, D., Firenze: Università degli studi di Firenze, Dipartimento di scienze dell'antichità Giorgio Pasquali, 2000, 119–133.
- . 'Galen's 'On My Own Books': New Material from Meshed, Rida, Tibb. 5233.' In *The Unknown Galen*, edited by Nutton, V., London: Institute of Classical Studies, 2002, 9–18.
- . 2002. *Galien: Exhortation à l'étude de la médecine, Art médical*. Paris: Les Belles Lettres.
- Boudon-Millot, V. 2007a. *Galien: Introduction générale, Sur l'ordre de ses propres livres, Sur ses propres livres, Que l'excellent médecin est aussi philosophe*. Paris: Les Belles Lettres.

- . 'Un traité perdu de Galien miraculeusement retrouvé, le Sur l'inutilité de se chagriner: texte grec et traduction française.' In *La science médicale antique: nouveaux regards*, edited by Boudon-Millot, V., Guardasole, A. and Magdelaine, C., Paris: Beauchesne, 2007b, 72–123.
- Boudon-Millot, V., and Pietrobelli, M. A. 2005. De l'arabe au grec: un nouveau témoin du texte de Galien (*le vladaton* 14) Par M^{me} Véronique Boudon-Millot et M. Antoine Pietrobelli. *Comptes rendus des séances de l'année de Académie des Inscriptions & Belles lettres*: 497–534.
- Bowersock, G. W. 1969. *Greek Sophists in the Roman Empire*. Oxford: Clarendon Press.
- Brunt, P. A. 1994. The Bubble of the Second Sophistic. *Bulletin of the Institute of Classical Studies* 39: 25–52.
- Burgess, T. C. 1987. *Epideictic Literature*. New York and London: Garland Publishing.
- Chroust, A. H. 1965. A Brief Account of the Reconstruction of Aristotle's Protrepticus. *Classical Philology* 60 (4): 229–239.
- Cichocka, H. 1992. Progymnasma as a Literary Form. *Studi Italiani di Filologia Classica* 10 (1–2): 991–1000.
- Congourdeau, M.-H. 2007. *L'Embryon et son âme dans les sources grecques: VIe sie`cle av. J.-C.-Ve sie`cle apr. J.-C.* Paris: Association des amis du Centre d'histoire et civilisation de Byzance.
- Conte, G. B. 'Empirical and Theoretical Approaches to Literary Genre.' In *The Interpretation of Roman Poetry: Empiricism or Hermeneutics*, edited by Galinsky, K., New York: Peter Lang, 1992, 104–123.
- Corbett, E. P. J. 1990. *Classical Rhetoric for the Modern Student*. 3rd edition ed. New York and Oxford: Oxford University Press.
- Curtis, H. 1921. The Scale of the Universe. *Bulletin of the National Research Council* 2 (3): 194–217.
- Curtis, T. 'Didactic and Rhetorical Strategies in Galen's 'De pulsibus ad tirones'.' In *Authorial Voices in Greco-Roman Technical Writing*, edited by Doody, A. and Taub L., Trier: Wissenschaftlicher Verlag, 2009, 63–79.
- Daremborg, C. 1879. *Oeuvres de Rufus d'Ephese*. 1966 reprint. Amsterdam: Hakkert.
- Dean-Jones, D. E. 1995. Galen 'On the Constitution of the Art of Medicine': Introduction, Translation and Commentary, Classics, University of Texas, Austin.
- de Lacy, P. 1945. The Stoic Categories as Methodological Principles. *Transactions and Proceedings of the American Philological Association* 76: 246–263.
- . 1966a. Galen and the Greek Poets. *Greek, Roman, and Byzantine Studies* 7: 259–266.

- . 'Plato and the Method of the Arts.' In *The Classical Tradition*, edited by Wallach, L., Ithaca: Cornell University Press, 1966b, 123–132.
- . 1972. Galen's Platonism. *The American Journal of Philology* 93 (1): 27–39.
- . 1978. *Galen De placitis Hippocratis et Platonis: libri I–V*. Vol. V 4.1.2. Berlin: Akademie Verlag.
- . 1980. *Galen De placitis Hippocratis et Platonis: libri VI–IX*. Vol. V 4.1.2, CMG. Berlin: Akademie Verlag.
- . 1992. *Galen De semine*. Vol. 5.3.1, CMG. Berlin: Akademie Verlag.
- . 1996. *Galen De elementis ex Hippocratis sententia*. Vol. V 1.2, CMG. Berlin: Akademie Verlag.
- Delorme, J. 1960. *Gymnasion: Études sur les monuments consacrés à l'éducation en Grèce*. Paris: E. de Boccard.
- del Fabbro, M. 1979. Il Commentario nella Tradizione Papiracea. *Studia Papyrologica* 18 (2): 69–132.
- des Places, É. 1982. *Vie de Pythagore. Lettre à Marcella*. Paris: Les Belles Lettres.
- Devitt, A. 1993. Generalizing about Genre: New Conceptions of an Old Concept. *College Composition and Communication* 44 (4): 573–586.
- . 2000. Integrating Rhetorical and Literary Theories of Genre. *College English* 62 (6): 696–718.
- Dickerman, S. O. 1911. Some Stock Illustrations of Animal Intelligence in Greek Psychology. *Transactions and Proceedings of the American Philological Association* 42: 123–30.
- Dickey, E. 1996. *Greek Forms of Address: From Herodotus to Lucian*. Oxford: Oxford University Press.
- . 2007. *Ancient Greek Scholarship: A Guide to Finding, Reading, and Understanding Scholia, Commentaries, Lexica, and Grammatical Treatises from their Beginnings to the Byzantine Period*. Oxford: Oxford University Press.
- Dillon, J. 1993. *Alcinous: The Handbook of Platonism*. Oxford: Clarendon Press.
- Dorandi, T. 'Zwischen Autographie und Diktat: Momente der Textualität in der antiken Welt.' In *Vermittlung und Tradierung von Wissen in der griechischen Kultur*, edited by Althof, J. and Kullman, W., Tübingen: Gunter Narr Verlag, 1993, 71–86.
- . 2000. *Le stylet et la tablette. Dans le secret des auteurs antiques*. Paris: Les Belles Lettres.
- Drabkin, I. E. 1960. *Galileo: On Motion*. Wisconsin: University of Wisconsin Press.
- Drake, S. 1960. *Galileo: Il Saggiatore, The Assayer*. Philadelphia: The University of Pennsylvania Press.

- Düring, I. 1969. *Der Protreptikos des Aristoteles*. Frankfurt: Vittorio Klostermann.
- Durling, R. J. 1979. Lexicographical Notes on Galen's Pharmacological Writings. *Glotta* 57: 218–224.
- . 1986. Prepositional Idiom in Galen. *Glotta* 64: 24–30.
- . 1988. Some Particles and Particle Clusters in Galen. *Glotta* 66: 183–189.
- . 1992. The Language of Galenic Pharmacy. *Glotta* 70: 62–70.
- Ebert, T. 'Dialecticians and Stoics on the Classification of Propositions.' In *Dialektiker und Stoiker*, edited by Ebert, T. and Döring, K., Stuttgart: Franz Steiner Verlag, 1993, 110–127.
- Eden, K. 1997. *Hermeneutics and the Rhetorical Tradition*. New Haven: Yale University Press.
- Edlow, R. B. 1977. *Galen on Language and Ambiguity*. Leiden: Brill.
- Eyre, J. J. 1963. Roman Education in the Late Republic and Early Empire. *Greece and Rome* 10 (1): 47–59.
- Farrell, J. 2003. Classical Genre in Theory and Practice. *New Literary History* 34 (3): 383–408.
- Favaro, A. 1890–1909. *Le Opere di Galileo Galilei*. 20 vols. Florence: Barbera.
- Festugière, A. J. 1973. *Les trois 'protreptiques' de Platon: Euthydeme, Phedon, Epinomis*. Paris: J. Vrin.
- Fichtner, G. 1997. *Corpus Galenicum: Verzeichnis der galenischen und pseudogalenischen Schriften*. Tübingen: Institut für Geschichte der Medizin
- Fine, G. 1977. Plato on Naming. *The Philosophical Quarterly* 27 (109): 289–301.
- Fitzgerald, J. T., and White, L. M. 1983. *The Tabula of Cebes*. Chico: Scholars Press.
- Flemming, R. 'Galen's Imperial Order of Knowledge.' In *Ordering Knowledge in the Roman Empire*, edited by König, J. and Whitmarsh, T., Cambridge: Cambridge University Press, 2007, 241–277.
- . 'Commentary.' In *The Cambridge Companion to Galen*, edited by Hankinson, R. J., Cambridge: Cambridge University Press, 2008, 323–354.
- Fotinis, A. P. 1979. *The De anima of Alexander of Aphrodisias*. Washington: University Press of America, Inc.
- Fortuna, S. 1997. *Galen De constitutione artis medicae ad Patrophilum*. Vol. V 1.3, CMG. Berlin: Akademie Verlag.
- Frede, D. 2008. Alexander of Aphrodisias. The Metaphysics Research Lab Center for the Study of Language and Information, 2007 2003 [cited June 2008]. Available from <http://plato.stanford.edu/entries/alexander-aphrodisias/#1.1>.

- Frede, M. 'On Galen's Epistemology.' In *Galen: Problems and Prospects*, edited by Nutton, V., London: Wellcome Institute for the History of Medicine, 1981, 65–86.
- Frede, M., and Walzer, R. 1985. *Galen: Three Treatises on the Nature of Science*. Indianapolis and Cambridge: Hackett Publishing Company.
- Frow, J. 2006. *Genre*. Edited by Drakakis, J., *The New Critical Idiom*. London and New York: Routledge.
- Fuhrmann, M. 1966. *Anaximenis ars rhetorica*. Leipzig: Teubner.
- Gaiser, K. 1959. *Protreptik und Paränese bei Platon*. Stuttgart: W. Kohlhammer Verlag.
- García-Ballester, L. 'On the Origin of the 'Six Non-natural Things' in Galen.' In *Galen und das hellenistische Erbe*, edited by Kollesch, J. and Nickel, D., Stuttgart: Franz Steiner Verlag, 1993, 105–115.
- Genette, G. 1997. *Paratexts: Thresholds of Interpretation*, translated by Lewin, J., edited by Macksey, R. and Sprinker, M., Cambridge: Cambridge University Press. Original edition, 1987.
- Gill, C. 2007. Galen and Stoics Mortal Enemies or Blood Brothers. *Phronesis* 52 (2): 88–120.
- Goldman, A. I. 1994. Psychological, Social, and Epistemic Factors in the Theory of Science. *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1994: 277–286.
- Göransson, T. 1995. *Albinus, Alcinous, Arius Didymus*. Vol. 61, *Studia Graeca et Latina Gothoburgensia*. Västermik: Ekblads.
- Gottschalk, H. B. 'Aristotelian Philosophy in the Roman World.' In *ANRW*, Vol. II.36.2, edited by Haase, W. and Temporini, H., Berlin: Walter de Gruyter, 1987, 1079–1174.
- Goulet-Cazé, M.-O. 1982. *Porphyre, La Vie de Plotin*. Vol. 1, *Histoire des doctrines de l'antiquité classique*. Paris: Vrin.
- Grant, R. M. 1983. Paul, Galen, and Origen. *Journal of Theological Studies* 34: 533–36.
- Hadot, I. 2001. *Simplicius: Commentaire sur le Manuel d'Épictète*. Paris: Belles lettres.
- Hankinson, R. J. 'Galen on the Foundations of Science.' In *Galeno: obra, pensamiento e influencia: coloquio internacional celebrado en Madrid, 22–25 de Marzo de 1988*, edited by López Férez, J. A., Madrid: Universidad Nacional de Educación a Distancia, 1991, 15–29.
- . 'Galen's Philosophical Eclecticism.' In *ANRW*, Vol. II.36.5, edited by Haase, W., Berlin: Walter de Gruyter, 1992a, 3505–3522.
- . 1992b. A Purely Verbal Dispute? Galen on Stoic and Academic Epistemology. *Le Stoïcisme: Revue internationale de philosophie* 45 (3): 267–300.

- . ‘Galen’s Concept of Scientific Progress.’ In *ANRW*, Vol. II.37.2, edited by Haase, W., Berlin: Walter de Gruyter, 1994a, 1775–1789.
- . ‘Usage and Abusage: Galen on Language.’ In *Language*, edited by Everson, S. Cambridge: Cambridge University Press, 1994b, 166–187.
- . ‘The Growth of Medical Empiricism.’ In *Knowledge and the scholarly medical traditions*, edited by Bates, D., Cambridge: Cambridge University Press, 1995, 60–83.
- . 1998. *Galen on Antecedent Causes*. Cambridge: Cambridge University Press.
- . ‘Philosophy of Nature.’ In *The Cambridge Companion to Galen*, edited by Hankinson, R. J., Cambridge: Cambridge University Press, 2008, 210–241.
- Hanson, A. ‘Galen: Author and Critic.’ In *Editing Texts: Texte edieren*, edited by Most, G. W., Göttingen: Vandenhoeck & Ruprecht, 1998, 22–53.
- Hanson, A., and Green, M. H. ‘Soranus of Ephesus: Methodicorum princeps.’ In *ANRW*, Vol. II.37.2, edited by Haase, W., Berlin: Walter de Gruyter, 1994, 968–1075.
- Harmon, A. M. 1921. *Lucian*. 8 vols. Vol. 3, *Loeb*. New York: G.P. Putnam’s Sons.
- Harrison, G. W. M. 2000. Problems with the Genre of Problems: Plutarch’s Literary Innovations. *Classical Philology* 95 (2): 193–199.
- Hartlich, P. 1889. De exhortationum a Graecis Romanisque scriptarum historia et indole. *Leipziger Studien zur classischen Philologie* 11: 207–336.
- Heath, M. 2003. Theon and the History of the Progymnasmata. *Greek, Roman and Byzantine Studies* 43 (1): 129–160.
- Helmreich, G. 1893. *Thrasyboulos*. Vol. 3, *Claudii Galeni Pergameni Scripta Minora*. Leipzig: Teubner.
- Henry, P., and Schwyzer, H.-R. 1951. *Plotini opera*. Vol. 1. Leiden: Brill.
- Herrero de Jáuregui, M. 2008. The Protrepticus of Clement of Alexandria. PhD, Department of History of Religions, Università di Bologna.
- Hicks, R. D. 1942. *Diogenes Laertius: Lives of Eminent Philosophers*. Vol. 1, *Loeb*. London: William Heinemann LTD.
- Hock, R. F., and O’Neil, E. N. 1986. *The Chreia in Ancient Rhetoric*. Vol. 1. Atlanta: Society of Biblical Literature.
- Hope, R. 1930. *The Book of Diogenes Laertius*. New York: Columbia University Press.
- Hutchinson, D. S., and Johnson, M. R. 2005. Authenticating Aristotle’s Protrepticus. *Oxford Studies in Ancient Philosophy* 29: 193–294.
- Hymes, D. ‘Models of Interaction of Language and Social Life.’ In *Directions in Sociolinguistics: The Ethnography of Communication*, edited by Gumperz, J. J. and Hymes, D., New York, 1972, 35–71.

- Ibáñez, J.-M. N. 2003. Galen's Treatise 'Thrasylbulus' and the Dispute between 'Paidotribes' and 'Gymnastes'. *Nikephoros* 16: 147–156.
- Ieraci Bio, A. M. 'Sulla concezione del medico pēpaideuménos in Galeno e nel tardoantico.' In *Galeno: Obra, pensamiento e influencia: Coloquio internacional celebrado en Madrid, 22–25 de Marzo de 1988*, edited by López Fércz, J. A., Madrid: Universidad Nacional de Educacion a Distancia, 1991, 133–151.
- Ihm, S. 2002. *Clavis Commentariorum der antiken medizinischen Texte*. Leiden: Brill.
- Ilberg, J. 1889. Ueber die Schriftstellerei des Klaudios Galenos. *Rheinisches Museum* 44: 207–239.
- . 1896. Ueber die Schriftstellerei des Klaudios Galenos. *Rheinisches Museum* 51: 165–196.
- . 1927. *Sorani Gynaeciorum libri iv*. Vol. IV, CMG. Leipzig: Teubner.
- Irwin, T. 1988. *Aristotle's First Principles*. Oxford: Clarendon Press.
- Janson, T. 1964. *Latin Prose Prefaces: Studies in Literary Conventions*. Stockholm: Almqvist & Wiksell.
- Jenner, K. A. 1989. A Study of Galen's Commentary on the 'Prognostikon' I.1–26. D. Phil., Wadham College, Oxford, Oxford.
- Jordan, M. D. 1986. Ancient Philosophic Protreptic and the Problem of Persuasive Genres. *Rhetorica* (4): 309–333.
- Jouanna, J. 1975. *Hippocrate: Le nature de l'homme*. Vol. I 1.3, CMG. Berlin: Akademie Verlag.
- . 'La lecture du traité Hippocratique de la nature de l'homme par Galien.' In *Le commentaire entre tradition et innovation: Actes du colloque international de l'institut des traditions textuelles*, edited by Goulet-Cazé, M.-O., Paris: Librairie Philosophique J. Vrin, 2000, 273–292.
- Jüthner, J. 1909. *Philostratos über Gymnastik*. Leipzig: Teubner.
- Kennedy, G. 'Sophists and Physicians of the Greek Enlightenment.' In *Philosophy, History, and Oratory*, edited by Easterling, P. E. and Knox, B. M. W., Cambridge: Cambridge University Press, 1989, 60–65.
- . 1994. *A New History of Classical Rhetoric*. Princeton: Princeton University Press.
- . 1999. *Classical Rhetoric and its Christian and Secular Tradition from Ancient to Modern Times*. 2 ed. Chapel Hill: The University of North Carolina Press.
- . 2003. *Progymnasmata: Greek Textbooks of Prose Composition and Rhetoric*. Atlanta: Society of Biblical Literature.
- King, R. A. H., ed. *Common to Body and Soul*. New York: Walter de Gruyter, 2006.

- Kitcher, P. 'Scientific Knowledge.' In *The Oxford Handbook of Epistemology*, edited by Moser, P. K., Oxford: Oxford University Press, 2002, 385–407.
- König, J. 2005. *Athletics and Literature in the Roman Empire*. Cambridge: University Press.
- Kollesch, J. 'Galen und die Zweite Sophistik.' In *Galen: Problem and Prospects*, edited by Nutton, V., London: Wellcome Institute, 1981, 1–11.
- Kraus, C. S. 'Reading Commentaries/Commentaries as Reading.' In *The Classical Commentary: Histories, Practices, Theory*, edited by Gibson, R. K. and Kraus, C. S., Leiden: Brill, 2002, 1–27.
- Kühn, C. G. 1819–33. *Claudii Galeni opera omnia*. Leipzig: C. Cnobloch.
- Kümmel, W. F. 1974. 'Der Puls und das Problem der Zeitmessung in der Geschichte der Medizin', *Medizinhistorisches Journal* 9: 1–22.
- Lacy, P. D. 1966. Galen and the Greek Poets. *Greek, Roman, and Byzantine Studies* 7: 259–266.
- Langslow, D. 1989. Latin Technical Language: Synonyms and Greek Words in Latin Medical Terminology. *Transactions of the Philological Society* 87 (1): 33–53.
- . 2000. *Medical Latin in the Roman Empire*. Oxford: Oxford University Press.
- Lauden, L. 1981. A Confutation of Convergent Realism. *Philosophy of Science* 48: 19–49.
- Lengen, R. 2002. *Form und Funktion der aristotelischen Pragmatik*. Stuttgart: Franz Steiner Verlag.
- Lloyd, G. E. R. 1989. *The Revolutions of Wisdom: Studies in the Claims and Practice of Ancient Greek Science*. Berkeley: University of California Press.
- Long, A. A. 1996. *Stoic Studies*. Cambridge: Cambridge University Press.
- Long, H. S. 1964. *Diogenis Laertii vitae philosophorum*. Vol. 1. Oxford: Clarendon Press.
- López Férez, J. A. 'La rhétorique chez Galien.' In *La rhétorique grecque: actes du Colloque 'Octave Navarre'*, edited by Galy, J.-M. and Thivel, A. Nice: Association des publications de la Faculté des lettres de Nice, 1994, 223–232.
- . 'Lectura y comentario de algunos textos de Galeno relacionados con la retórica.' In *Desde los poemas homéricos hasta la prosa griega del siglo IV dC. Veintiséis estudios filológicos*, edited by López Férez, J. A., Madrid: Ediciones clásicas, 1999, 420–445.
- Machamer, P. 'The Person Centered Rhetoric of the 17th Century.' In *Persuading Science: The Art of Scientific Rhetoric*, edited by Pera, M. and Shea, W. Canton: Science of History Publications, 1991.
- MacLachlan, R. F. 2004. *Epitomes in Ancient Literary Culture*. PhD, St. John's College, University of Cambridge, Cambridge.

- Manetti, D., and Roselli, A. 'Galeno commentatore di Ippocrate.' In *ANRW*, Vol. II.37.2, edited by Haase, W., Berlin: Walter de Gruyter & Co, 1994, 1529–1635.
- Mansfeld, J. 'Doxography and Dialectic: The Sitz im Leben of the 'Placita'.' In *ANRW*, Vol. II.36.4, Berlin and New York: Walter de Gruyter, 1990, 3056–3229.
- . 'Physikai doxai and *Problemata physika* from Aristotle to Aetius and Beyond.' In *Theophrastus: His Psychological, Doxographical, and Scientific Writings*, edited by Fortenbaugh, W. W. and Gutas, D., New Brunswick: Transaction papers, 1992, 63–111.
- . 1994. *Prolegomena: Questions to be Settled Before the Study of an Author, or a Text*. Leiden: Brill.
- Manuli, P. 'Galen and Stoicism.' In *Galen und das hellenistische Erbe*, edited by Kollesch, J. and Nickel, D., Stuttgart: Franz Steiner Verlag, 1993, 53–61.
- Mattern, S. P. 2008. *Galen and the Rhetoric of Healing*. Baltimore: Johns Hopkins University Press.
- Mau, J. 1971. *Plutarchi moralia*. Vol. 5.2.1. Leipzig: Teubner.
- Mendelson, M. 1994. Declamation, Context, and Controversiality. *Rhetoric Review* 13 (1): 92–107.
- Mewaldt, I. 1914. *Galenus In Hippocratis De natura hominis commentaria tria*. Vol. V 9.1, CMG. Leipzig: Teubner.
- Meechan, M., and Rees-Miller, J. 'Language in Social Contexts.' In *Contemporary Linguistics: An Introduction*, edited by O'Grady, W., Archibald, J., Aronoff, M. and Rees-Miller, J., New York: Bedford/St. Martins, 2001, 537–590.
- Miller, S. G. 2004. *Ancient Greek Athletics*. New Haven: Yale University Press.
- Misch, G. 1951. *A History of Autobiography in Antiquity*. Translated by Dickes, E. W. Vol. 1. Cambridge: Harvard University Press.
- Morau, P. 1984. *Der Aristotelismus bei den Griechen von Andronikus bis Alexander von Aphrodisias*. Vol. 2. Berlin: de Gruyter.
- Morgan, T. J. 1999. Literate Education in Classical Athens. *The Classical Quarterly* 49 (1): 44–61.
- Morison, B. 'Logic.' In *The Cambridge Companion to Galen*, edited by Hankinson, R. J., Cambridge: Cambridge University Press, 2008, 66–115.
- . 'Language.' In *The Cambridge Companion to Galen*, edited by Hankinson, R. J., Cambridge: Cambridge University Press, 2008, 116–156.
- Mullach, F. W. A. 1867. *Fragmenta philosophorum Graecorum*. Vol. 2. Paris: Didot.

- Mullett, M. 1992. Dumbarton Oaks Papers. *Homo Byzantinus: Papers in Honor of Alexander Kazhdan* 46: 233–243.
- Mutschmann, H. 1912. *Sexti Empirici opera*. Vol. 1. Leipzig: Teubner.
- Newmyer, S. T. 2006. *Animals, Rights, and Reason in Plutarch and Modern Ethics*. New York: Routledge.
- Niebyl, P. H. 1971. The Non-Naturals. *Bulletin of the History of Medicine* 45: 486–492.
- Nickel, D. 1989. *Untersuchungen zur Embryologie Galens*. Berlin: Wiley-VCH.
- . ‘Stoa and Stoiker in Galens Schrift De foetuum formatione.’ In *Galen und das hellenistische Erbe*, edited by Kollesch, J. and Nickel, D., Stuttgart: Franz Steiner Verlag, 1993, 79–86.
- . 2001. *Galen De foetuum formatione*. Vol. V 3.3, CMG. Berlin: Akademie Verlag.
- Nutton, V. 1979. *Galen De praecognitione*. Vol. V 8.1, CMG. Berlin: Akademie Verlag.
- . ‘Galen and Medical Autobiography.’ In *From Democedes to Harvey: Studies in the History of Medicine*, London: Variorum Reprints, 1988a, 50–62.
- . ‘Galen in the Eyes of His Contemporaries.’ In *From Democedes to Harvey: Studies in the History of Medicine*, London: Variorum Reprints, 1988b, 315–324.
- . 1990. The Patient’s Choice: A New Treatise by Galen. *The Classical Quarterly* 40 (1): 236–257.
- . ‘Galen and Egypt.’ In *Galen und das hellenistische Erbe*, edited by Kollesch, J. and Nickel, D., Stuttgart: Franz Steiner Verlag, 1993, 11–31.
- . 1999. *Galen De propriis placitis*. Vol. V 3.2, CMG. Berlin: Akademie Verlag.
- . 2004. *Ancient Medicine*. London and New York: Routledge.
- Oser-Grote, C. ‘Einführung in das Studium der Medizin. Eisagogische Schriften des Galen in ihrem Verhältnis zum Corpus Hippocraticum.’ In *Gattungen wissenschaftlicher Literatur in der Antike*, edited by Haase, W., Althoff, J. and Asper, M., Tübingen: Gunter Narr Verlag, 1998, 95–117.
- Palerino, C. R., and Thijssen, J. M. M. H. 2004. *The Reception of the Galilean Science of Motion in Seventeenth-Century Europe*. Dordrecht: Kluwer.
- Papalas, A. J. 1981. Herodes Atticus: An Essay on Education in the Antonine Age. *History of Education Quarterly* 21 (2): 171–188.
- Parker, H. N. 1999. Greek Embryological Calendars and a Fragment from the Lost Work of Damastes, On the Care of Pregnant Women and Infants. *The Classical Quarterly* 49 (2): 515–534.
- Pearcy, L. T. ‘Medicine and Rhetoric in the Period of the Second Sophistic.’ In *ANRW*, Vol. II.37.1, edited by Haase, W., Berlin: Walter de Gruyter, 1993, 445–456.

- Perilli, L. 2004. *Menodoto di Nicomedia: Contributo A Una Storia Galeniana Della Medicina Empirica*. Leipzig: K.G.Saur.
- Pernot, L. 1998. 'Periautolgia' problèmes et méthodes de l'éloge de soi-même dans la tradition éthique et rhétorique Gréco-Romaine. *Revue des Études Grecques* 111: 101–124.
- Peterson, D. W. 1977. Observations on the chronology of the Galenic corpus. *Bulletin of the History of Medicine* 51: 484–95.
- Pfeiffer, R. 1968. *History of Classical Scholarship: From the Beginnings to the End of the Hellenistic Age*. London: Oxford University Press.
- Pinault, J. R. 1992. *Hippocratic Lives and Legends*. Leiden: Brill.
- Potter, P. 'Apollonius and Galen on Joints.' In *Galen und das hellenistische Erbe*, edited by Kollesch, J. and Nickel, D., Stuttgart: Franz Steiner Verlag, 1993, 117–123.
- Quercetanus, E. 1549. *Acroamaton in librum Hippocratis de Natura hominis commentarius unus (...) eiusdem auctoris in Cl. Galeni libros tres de Temperamentis, scholia*. Basel: Johannes Oporinus.
- Rabinowitz, W. G. 1957. Aristotle's Protrepticus and the Sources of its Reconstruction. *University of California Publications in Classical Philology* 16 (1): 1–96.
- Radermacher, L. 1905. *Opuscula Dionysii Halicarnasei*. Vol. 2. Leipzig: Teubner.
- Regenbogen, O. 'Pinax.' In *Realencyclopädie der classischen Altertumswissenschaft*, edited by Pauly, A. F. and Wissowa, G., Vol. 20, Stuttgart, 1950, 1408–1482.
- Rescher, N. 1967. *Temporal Modalities in Arabic Logic*. Vol. 2. Dordrecht: D. Reidel.
- Rescher, N., and E. Marmura, M. 1965. *The Refutation by Alexander of Aphrodisias of Galen's Treatise on the Theory of Motion*. Islamabad: Islamic Research Institute.
- Reynolds, L. D., and Wilson, N. G. 1974. *Scribes and Scholars: A Guide to the Transmission of Greek and Latin Literature*. 2nd ed. Oxford: Clarendon Press.
- Richardson, N. J. 'Aristotle and Hellenistic Scholarship.' In *La philologie grecque à l'époque hellénistique a romaine*, edited by Montanari, F., Geneva: Foundation Hardt *Entretiens*, 1994, 47–28.
- Riddle, J. M. 'High Medicine and Low Medicine in the Roman Empire.' In *ANRW*, Vol. II.37.1, edited by Haase, W., Berlin: Walter de Gruyter, 1993, 102–120.
- Robinson, T. M. 'The Defining Features of Mind–Body Dualism in the Writings of Plato.' In *Psyche and Soma: Physicians and Metaphysicians of the Mind–Body Problem from Antiquity to Enlightenment*, edited by Wright, J. P. and Potter, P., Oxford: Clarendon Press, 2000, 37–55.
- Rose, V. 1870. *Anecdota Graeca et Graecolatina*. Vol. 2. Berlin: Fer. Duemmler.

- Roselli, A. 'Notes on the Doxai of Doctors in Galen's Commentaries on Hippocrates.' In *Ancient Histories of Medicine*, edited by van der Eijk, P. J., Leiden: Brill, 1999, 359–381.
- . 'Galen and the Ambiguity of Written Language: The De captionibus and the Commentaries on Hippocrates.' In *Actualité des anciens sur la théorie du langage*, edited by Petrilli, R. and Gambarara, D., Münster: Nodus Publikationen, 2004, 51–61.
- Ross, W. D. 1970. *Aristotelis topica et sophistici elenchi*. Oxford: Clarendon Press. Original edition, 1958.
- Runia, D. T. 'The Placita Ascribed to Doctors in Aëtius' Doxography to Physics.' In *Ancient Histories of Medicine: Essays in Medical Doxography and Historiography in Classical Antiquity*, edited by van der Eijk, P. J., Leiden: Brill, 1999, 189–250.
- . 'What is Doxography?' In *Ancient Histories of Medicine: Essays in Medical Doxography and Historiography in Classical Antiquity*, edited by van der Eijk, P. J., Leiden: Brill, 1999, 33–55.
- Russell, D. A. 1983. *Greek Declamation*. Cambridge: Cambridge University.
- . 1989. Arts and Sciences in Ancient Education. *Greece and Rome* 36 (2): 210–225.
- . 2001. *Quintilian: The Orator's Education Books 1–2*. London: Harvard University Press.
- Russell, D. A., and Wilson, N. G. 1981. *Menander Rhetor*. Oxford: Clarendon Press.
- Rutherford, I. 'The Poetics of the 'Paraphthegma': Aelius Aristides and the Decorum of Self-Praise.' In *Ethics and Rhetoric*, edited by Innes, D., Hine, H. and Pelling, C., Oxford: Clarendon Press, 1995, 193–204.
- Ryle, G. 'Dialectic in the Academy.' In *Aristotle on Dialectic*, edited by Owen, G. E. L. London: Oxford University Press, 1968.
- Sager, J. C., Dungworth, D., and McDonald, P. F. 1980. *English Special Languages: Principles and Practice in Science and Technology*. Wiesbaden: Brandstetter.
- Seager, W. 1988. Scientific Anti-Realism and the Epistemic Community. *PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association* 1988: 181–187.
- Schenkeveld, D. M. 1992. Prose Usages of akouein 'to read'. *The Classical Quarterly* 42 (1): 129–141.
- . 'Philosophical Prose.' In *Handbook of Classical Rhetoric in the Hellenistic Period 330 BC–AD 400*, edited by Porter, S. E., Leiden: Brill, 1997, 195–264.
- Schenkl, H. 1916. *Epicteti dissertationes ab Arriano digestae*. Leipzig: Teubner.
- Schiappa, E. 1991. Sophistic Rhetoric: Oasis or Mirage? *Rhetoric Review* 10 (1): 5–18.

- Schneeweis, G. 2005. *Protreptikos: Hinführung zur Philosophie*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schöne, H. 'De Pulsibus: Marcellinos Pulslehre. Ein griechisches Anekdoton.' In *Festschrift zur 49. Versammlung deutscher Philologen und Schulmänner*, Basel: Birkhäuser, 1907, 455–471.
- Shapley, H. 1921. The Scale of the Universe. *Bulletin of the National Research Council* 2 (3): 171–193.
- Sharples, R. W. 'The School of Alexander?' In *Aristotle Transformed*, edited by Sorabji, R., London: Duckworth, 1990, 83–111.
- . 'Aristotle's Exoteric and Esoteric Works: Summaries and Commentaries.' In *Greek and Roman Philosophy: 100 BC–200 AD*, edited by Sharples, R. W. and Sorabji, R., London: Institute of Classical Studies, 2007, 505–512.
- Sicking, C. M. J. 'Plutarch's Literary Theory: A Philosopher's Alibi for Teaching Literature.' In *Distant Companions: Selected Papers*, edited by Sicking, C. M. J., Leiden: Brill, 1998, 101–113.
- Singer, P. N. 1992. Galen on the Soul: Philosophy and Medicine in the Second Century A.D. PhD, University of Cambridge, Cambridge.
- . 1997a. *Galen: Selected Works*. Oxford: Oxford University Press.
- . 1997b. Levels of Explanation in Galen. *The Classical Quarterly* 47 (2): 525–542.
- Slings, S. R. 1981. A Commentary on the Platonic Clitophon. Doctor in de letteren, Faculteit der wiskunde en natuurwetenschappen, Vrije Universiteit te Amsterdam, Amsterdam.
- . 'Protreptic in Ancient Theories of Philosophical Literature.' In *Greek Literary Theory After Aristotle*, edited by Abbenes, J., Slings, S. R. and Sluiter, I., 173–192. Amsterdam: VU University Press, 1995.
- Sluiter, I. 'The embarrassment of imperfection: Galen's assessment of Hippocrates' linguistic merits.' In *Ancient Medicine in its Socio-cultural Context*, edited by Horstmannshoff, H. F. J., van der Eijk, P. J. and Schrijvers, P. H., Amsterdam: Rodopi, 1995, 519–534.
- . 'The Poetics of Medicine.' In *Greek Literary Theory after Aristotle*, edited by J.G.J. Abbenes, S. R. S., and I. Sluiter, Amsterdam: VU University Press, 1995, 193–213.
- . 'Commentaries and the Didactic Tradition.' In *Commentaries-Kommentare*, edited by Most, G. W., Göttingen: Vandenhoeck & Ruprecht, 1999, 173–205.
- . 'The Dialectics of Genre: Some Aspects of Secondary Literature and Genre in Antiquity.' In *Matrices of Genre: Authors, Canons, and Society*, edited by Depew, M. and Obbink, D., Cambridge: Harvard University Press, 2000, 183–203.
- Smith, R. 1993. Aristotle on the Uses of Dialectic. *Synthese* 96: 335–358.

- . 1994. Dialectic and the Syllogism. *Ancient Philosophy* 14: 133–151.
- Smith, R. W. 1982. *The Expanding Universe, Astronomy's 'Great Debate'. 1900–1931*. Cambridge: Cambridge University Press.
- Smith, W., ed. *Dictionary of Greek and Roman Biography and Mythology*. 3 vols. London: Taylor and Walton, 1844–1849.
- Smith, W. D. 1979. *The Hippocratic Tradition*. London: Cornell University Press.
- Sorabji, R. 'The Ancient Commentators on Aristotle.' In *Aristotle Transformed*, edited by Sorabji, R., London: Duckworth, 1990, 1–30.
- Starr, J. 'Was Paraenesis for Beginners?' In *Early Christian Paraenesis in Context*, edited by Starr, J. and Engberg-Pederson, T., New York and Berlin: Walter de Gruyter, 2004, 73–111.
- Stowers, S. K. 1986. *Letter Writing in Greco-Roman Antiquity*. Philadelphia: Westminster Press.
- Swain, S. 1996. *Hellenism and the Empire*. Oxford.
- Swales, J. M. 1990. *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge University Press.
- Swancutt, D. M. 'Paraenesis in Light of Protrepsis: Troubling the Typical Dichotomy.' In *Early Christian Paraenesis in Context*, edited by Starr, J. and Engberg-Pedersen, T., Berlin and New York: Walter de Gruyter, 2004, 113–153.
- Tarrant, H. 'Platonist Educators in a Growing Market: Gaius; Albinus; Taurus; Alcinous.' In *Greek and Roman Philosophy 100 BC–200 AD*, edited by Sharples, R. W. and Sorabji, R., London: Institute of Classical Studies, 2007, 449–465.
- Tatarkiewicz, W. 1963. Classification of Arts in Antiquity. *Journal of the History of Ideas* 24 (2): 231–240.
- Throm, H. 1932. *Die Thesis: Ein Beitrag zu ihrer Entstehung und Geschichte*. Paderborn: F. Schöningh.
- Tieleman, T. 1991. Diogenes of Babylon and Stoic Embryology. *Mnemosyne* 44 (1–2): 106–125.
- . 'Dialectic and Science: Galen, Herophilus, and Aristotle on Phenomena.' In *Ancient Medicine in its Socio-Cultural Context*, edited by van der Eijk, P. J., Horstmanshoff, H. F. J. and Schrijvers, P. H., Amsterdam: Rodopi, 1995, 487–495.
- . 1996. *Galen and Chrysippus on the Soul: Argument and Refutation in the De Placitis Books II–III, Philosophia Antiqua*. Leiden: Brill.
- Todd, R. 1976. *Alexander of Aphrodisias on Stoic Physics: A Study of the De Mixtione with Preliminary Essays, Text, Translation and Commentary*. Leiden: Brill.

- van der Eijk, P. J. 'Towards a Rhetoric of Ancient Scientific Discourse: Some Formal Characteristics of Greek Medicine and Philosophical Texts (Hippocratic Corpus, Aristotle).' In *Grammar as Interpretation*, edited by Bakker, E. J., Leiden, New York, and Köln: Brill, 1997, 77–129.
- . 'Historical Awareness, Historiography and Doxography in Greek and Roman Medicine.' In *Ancient Histories of Medicine*, edited by van der Eijk, P. J., Leiden: Brill, 1999, 1–31.
- . 'Therapeutics.' In *The Cambridge Companion to Galen*, edited by Hankinson, R. J., Cambridge: Cambridge University Press, 2008, 283–303.
- van der Meer, S. 2002. Le Protréptique en philosophie: essai de définition d'un genre. *Revue des études grecques* 115: 591–621.
- van Groningen, B. A. 1963. Ekdosis. *Mnemosyne* 16: 1–17.
- Vegetti, M. 'L'immagine del medico e lo statuto epistemologico della medicina in Galeno.' In *ANRW*, Vol. II.37.2, edited by Temporini, H. and Haase, W., Berlin: Walter de Gruyter, 1994, 1672–1717.
- . 'Traditions and Truth: Forms of Philosophical-Scientific Historiography in Galen's *De Placitis*.' In *Ancient Histories of Medicine: Essays in Medical Doxography and Historiography in Classical Antiquity*, edited by van der Eijk, P. J., Leiden: Brill, 1999, 333–357.
- von Karlheinz Hülser, K. 'Galen und die Logik.' In *ANRW*, Vol. II.36.5, edited by Haase, W., Berlin: Walter de Gruyter, 1992, 3523–3554.
- von Müller, I. 1895. *Über Galens Werk vom wissenschaftlichen Beweis*. Vol. 20. Munich: Akademie der Wiss.
- von Staden, H. 1989. *Herophilus: The Art of Medicine in Early Alexandria*. Cambridge: Cambridge University Press.
- . 'Author and Authority: Celsus on the Construction of a Scientific Self.' In *Tradición e innovación de la medicina latina de la antigüedad y de la alta edad media actas del IV Coloquio Internacional sobre los 'Textos Médicos Latinos Antiguos'*, edited by Vázquez Buján, M. E., Santiago de Compostela: Universidade de Santiago de Compostela, 1994, 103–117.
- . 1995a. Anatomy as Rhetoric: Galen on Dissection and Persuasion. *Journal of the History of Medicine and Allied Sciences* 50: 47–66.
- . 'Science as Text, Science as History, Galen on Metaphor.' In *Ancient medicine in its socio-cultural context : papers read at the Congress held at Leiden University*, 13–15

- April 1992*, edited by van der Eijk, P. J., Horstmanshoff, H. F. J. and Schrijvers, P. H., Amsterdam: Rodopi, 1995b, 499–518.
- . ‘Galen and the ‘Second Sophistic’.’ In *Aristotle and After*, edited by Sorabji, R., London: Institute of Classical Studies, 1997, 33–54.
- . ‘Gattung und Gedächtnis: Galen über Wahrheit und Lehrdichtung.’ In *Gattungen wissenschaftlicher Literatur in der Antike*, edited by Kullman, W., Althoff, J. and Asper, M., Tübingen: Gunter Narr Verlag, 1998, 65–94.
- . ‘Body, Soul, and Nerves: Epicurus, Herophilus, Erasistratus, the Stoics, and Galen.’ In *Psyche and Soma*, edited by Potter, P. and Wright, J. P., Oxford: Clarendon Press, 2000, 79–116.
- . ‘“A Woman Does Not Become Ambidextrous”: Galen and the Culture of Scientific Commentary.’ In *The Classical Commentary: Histories, Practices, Theory*, edited by Gibson, R. K. and Kraus, C. S., Leiden: Brill, 2002a, 109–140.
- . ‘Division, Dissection, and Specialization: Galen’s *On the Parts of the Medical Techne*.’ In *The Unknown Galen*, edited by Nutton, V., London: Institute of Classical Studies, 2002b, 19–45.
- . ‘Interpreting ‘Hippokrates’ in the 3rd and 2nd centuries BC.’ In *Ärzte und ihre Interpreten medizinische Fachtexte der Antike als Forschungsgegenstand der Klassischen Philologie*, edited by Müller, C. W., Brockmann, C. and Brunschön, C. W., Leipzig: K. G. Saur, 2006, 15–47.
- Walzer, R. 1949. New Light on Galen’s Moral Philosophy. *The Classical Quarterly* 43 (1/2): 82–96.
- . 1954. A Diatribe of Galen. *The Harvard Theological Review* 47 (4): 243–254.
- Whittaker, J. 1990. *Alcinoos: Enseignement des doctrines de Platon*. Paris: Les Belles Lettres.
- White, H. 2003. Commentary: Good of Their Kind. *New Literary History* 34 (2): 367–376.
- Wisse, J. ‘Greeks, Romans, and the Rise of Atticisms.’ In *Greek Literature: Greek Literature in the Roman Period and in Late Antiquity*, edited by Nagy, G., London: Routledge, 2001, 65–82.
- Wisse, J., Winterbottom, M., and Fantham, E. 2008. *M. Tullius Cicero De oratore libri III. A Commentary. Volume 5: Book III, 96–230*. Heidelberg: Carl Winter Universitätsverlag.
- Wittern, R. ‘Gattungen im Corpus Hippocraticum.’ In *Gattungen wissenschaftlicher Literatur in der Antike*, edited by Kullman, W. and Althoff, J., Tübingen: Gunter Narr Verlag, 1998, 17–36.

- Wittwer, R. 'Aspasian Lemmatology.' In *Aspasius: The Earliest Extant Commentary on Aristotle's Ethics*, edited by Alberti, A. and Sharples, R. W., Berlin: de Gruyter, 1999, 51–84.
- Wöhrle, G. 1990. *Studien zur Theorie der antiken Gesundheitslehre*. Stuttgart: Franz Steiner Verlag.
- Wright, J. P., and Potter, P., eds. *Psyche and Soma: Physicians and Metaphysicians on Mind-Body Problem from Antiquity to Enlightenment*. Oxford: Clarendon Press, 2000.
- Young, F. 1997. *Biblical Exegesis and the Formation of Christian Culture*. Cambridge: Cambridge University Press.